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ABSTRACT

To help meet the needs for manpower information, the interim manpower projections program was designed to provide detailed industry and occupational employment and manpower requirement projections for the States. This report presents the projections for the State of Georgia and includes: (1) population and civilian labor force projections; (2) total employment by industry; (3) employment by occupations; and (4) interpolated employment by industry and occupations, 1975 and 1976, and annual average job openings. Estimates of employment for 1975 and 1976 were obtained by linear interpolation of 1970 and 1980 data. A 127-page appendix provides: detailed Georgia interim manpower projections tables, national industry and occupation projections tables, a reprint of "Occupational Outlook Handbook in Brief, 1974-75," and "Supplement 3 to Tomorrow's Manpower Needs" (matching occupation classifications to vocational education program codes). (VA)

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# GEORGIA

# INTERIM MANPOWER PROJECTIONS

## Industries and Occupations

1970 - 1980 With Interpolated Projections
for 1975 and 1976

(VT - 102-186)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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This report was prepared in cooperation with the

U.S. Department of Labor,
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Georgia Department of Labor
Employment Security Agency

CE 005 360

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2/3

# TABLE OF CONTENTS

Page

Acknowledgements . . . . . . . . . . . . . . . . . . . . . . . . . 1

Introduction . . . . . . . . . . . . . . . . . . . . . . . . . 2

Highlights . . . . . . . . . . . . . . . . . . . . . . . . . 6

Population and Civilian Labor Force Projections . . . . . . . . . . . . . 9

Total Employment by Industry . . . . . . . . . . . . . . . . . . . . 12

Employment by Occupation . . . . . . . . . . . . . . . . . . . . . 23

Interpolated Employment by Industry and Occupation,
1975 and 1976, and Annual Average Job Openings . . . . . . . . . . . 36

Methodology . . . . . . . . . . . . . . . . . . . . . . . . . 44

Appendixes . . . . . . . . . . . . . . . . . . . . . . . . . 45

## GUIDE TO TABLES

Page

Table 1. Georgia Population by Selected Age Groups,
1960 and 1970 (Actual) and 1980 (Projected) . . . . . . . . . . 9

Table 2. Georgia Population, Decennial Change for Selected,
Age Groups, 1960-70 (Actual) and 1970-80 (Projected) . . . . . 9

Table 3. Employment Status of Georgia's Civilian
Noninstitutional Population 16 Years and Over,
1970 (Actual) and 1975, 1976, and 1980 (Projected) . . . . . . 10

Table 4. Employment Status of Georgia's Civilian
Noninstitutional Population 16 Years and Over
by Color, Sex, and Age, 1973 Annual Averages . . . . . . . . . 11

Table 5. Georgia Total Employment and Average Annual Rate of Change
by Major Sector, 1960-70 (Actual) and 1970-80 (Projected) . . . . 15

Table 6. Georgia Total Employment by Industry Group,
1970 and Projected to 1980 . . . . . . . . . . . . . . . . . 21

Table 7. Expected Changes in Major Occupational Classifications, 1970-80 26

Table 8. Employment by Major Occupational Group,
1960 and 1970, and Projected to 1980 . . . . . . . . . . . . . 27

Table 9. Percent Distribution of Employment by Major Occupational
Group, 1960 and 1970, and Projected to 1980 . . . . . . . . . . 28

Table 10. Average Annual Rate of Employment Change by Major
Occupational Group, 1960-70 (Actual) and 1970-80 (Projected) . . 30

Table 11. Georgia 1970 Employment and Projected 1980
Requirements by Occupational Group . . . . . . . . . . . . . 33

Table 12. Job Openings by Major Occupational Group, 1970-80 . . . . . . 35

Table 13. Georgia Industry Employment Interpolated to
1975, and Change to 1976 and 1980 . . . . . . . . . . . . . . 38

Table 14. Georgia Occupational Employment Interpolated to
1975, and Change to 1976 and 1980 . . . . . . . . . . . . . . 40

Table 15. Georgia 1976 Employment and Job Openings
by Occupational Group . . . . . . . . . . . . . . . . . . . 42

# GUIDE TO CHARTS

Page

Chart 1. Employment in Georgia, Total and in Goods-Producing and Services-Producing Industries, 1960, 1970, and Projected 1980 . . . 13

Chart 2. Employment in Goods-Producing and Services-Producing Industries as a Percent of Total Employment, 1960, 1970, and Projected 1980 . 14

Chart 3. Total Employment: Average Annual Rate of Change, by Major Sector, 1960-70 (Actual) and 1970-80 (Projected) . . . . . . . . 16

Chart 4. Employment Trends Among Major Occupational Categories, 1940-70 (Actual) and 1980 (Projected) . . . . . . . . . . . . . . 24

Chart 5. Employment in Major Occupational Groups, 1970 (Actual) and 1980 (Projected) . . . . . . . . . . . . . . . 25

Chart 6. Average Annual Job Openings in Major Occupational Categories and Groups . . . . . . . . . . . . . . . . . . . . 37

## GUIDE TO APPENDIXES

| Appendix | Title and Description | Page |
|---|---|---|
| A | Detailed Georgia Interim Manpower Projections Programs Tables. Industry and occupational data summarized in the report are given in greater detail in these tables . . . . . | 45 |
| B | National Industry and Occupation Projection Tables. These three tables showing national projections to 1980 are consistent with the 1985 projections published in the December 1973 Monthly Labor Review. . . . . . . . . . . | 102 |
| C | Reprint of "Occupational Outlook Handbook in Brief, 1974-75 Edition". Here in an article taken from the Summer 1974 edition of the BLS publication Occupational Outlook Quarterly is the national job outlook for some 270 occupations summarized from the 1974-75 edition of the Occupational Outlook Handbook. These occupations are grouped into 13 job clusters designed to help readers understand how different jobs relate to each other in a broad career field. . . . . . . . . . . . . . . . . . . | 138 |
| D | Supplement 3 to Tomorrow's Manpower Needs. This report seeks to improve the usefulness of the manpower projections for vocational educators and others interested in manpower planning by providing a link between the occupational classifications in the TMN publications and the Dictionary of Occupational Titles (DOT) and the categories which identify vocational education instruction programs . . . . . . . . . . . . . . . . . . . . . | 166 |

# ACKNOWLEDGEMENTS

This report was prepared by members of the staff of the Manpower Resources Section, Manpower Program Development Division, Employment Security Agency, Georgia Department of Labor. Work was begun under the general supervision of Maria M. Mallet and completed under Milton L. Martin who succeeded Mrs. Mallet as Chief of Manpower Resources, upon her retirement. Julian B. Brock served as project manager. This work would not have been possible without the cooperation and diligent efforts of many others in the Employment Security Agency.

Many persons in the U.S. Department of Labor, Manpower Administration and Bureau of Labor Statistics, and in the Lawrence Berkeley Laboratory (an Atomic Energy Commission facility with a huge computer capacity) contributed materially to the report. We particularly want to acknowledge the technical assistance and support rendered by Richard Dempsey of the National BLS Office and of Arthur C. Spinks, Chief of the Atlanta BLS Regional Office's Branch of Federal, State and Local Government Relations.

The narrative sections of this report drew heavily on several other reports, including BLS Bulletin No. 1673, The U.S. Economy in 1980; articles on "The United States Economy in 1985" in the December 1973 edition of the Monthly Labor Review published by the U.S. Department of Labor, Bureau of Labor Statistics; Georgia Jobs for the Future published by the Georgia Department of Labor, Employment Security Agency; and the April 1974 draft version of Guidelines for the Use and Analysis of Data Resulting from the Interim Manpower Projections Program prepared by the U.S. Department of Labor, Manpower Administration, Office of Policy, Evaluation and Research.

Appendixes B, C and D contain reprints of several BLS-prepared articles pertinent to the understanding and use of this report. (See Guide to Appendixes)

# INTRODUCTION

The Interim Manpower Projections Program, a cooperative project of the U. S. Department of Labor, Manpower Administration and Bureau of Labor Statistics, and the State Employment Security Agencies, provides industry and occupation employment projections on a comparable basis for the Nation, States and all Standard Metropolitan Statistical Areas (SMSA's) with a 1970 population of 250,000 or more. The purpose of the program as conceived by the Manpower Administration is outlined in the following three paragraphs.[1]

"There has long been a recognized need for both current and projected information on occupational employment levels and industrial staffing patterns, but the need for such occupational data as expressed by manpower and vocational education planners has often been only partially filled. Moreover, the growing involvement of national, State and local government in the effective and efficient utilization of the working-age population and the necessity for intelligent action in order to deal with possible future imbalances between the demand and supply of workers further demonstrates the essential need for reliable occupational manpower information.

"Such legislation as the Employment Act of 1946, the Vocational Education Act, as amended, and the Comprehensive Employment and Training Act of 1973 (CETA) emphasize the importance of information on future labor demand (i.e., manpower requirements) and labor supply in directing manpower training and vocational educational planning programs toward those occupations which demonstrate definitive long range needs for properly trained workers.

"To help meet the needs for manpower information, particularly on a local area basis as required by CETA, the Interim Manpower Projections Program was designed to provide detailed industry and occupational employment and manpower requirement projections for States and labor market areas for use in the Fiscal Year 1975 planning cycle. This information is also useful in helping to determine which occupations afford good opportunities for conducting manpower and vocational education training programs. The projections of future occupational manpower requirements for the States and their subdivisions will be especially valuable for employment counseling and vocational guidance purposes, for planning the establishment of manpower and vocational education training facilities, and for the development of appropriate curricula for manpower and vocational education training programs."

Some of the technical aspects of the project were described in a status report given by Dick Dempsey of the National BLS office at the Fourth Annual Conference of Research Directors of Employment Security Agencies held in Portland, Oregon, in September 1973. Part of the report is quoted below.[2]

"For those of you who aren't familiar with the two programs that I am immediately involved in, one is the national-state matrix system and the other this new industry projection project. Hopefully we will be producing projections of occupational employment requirements for all of the states and metropolitan areas of over 250,000 by the end of this year. Now, I'd like to give a status report. First the national-state matrix system. We have received from all the states their estimates of industrial employment for the full 1,208 cells for their matrix. We put them all together and added them up and, lo and behold, they came up as, I think, one-third of one percent different from total national employment, which just surprised the dickens out of us. That, by the way, is about 275,000, so it's not a drop in the bucket. Of the 1,208 individual industries in the matrix, only 24 of the sum total -- state totals -- came to a figure that was more or less than 10 percent away from the national figure, and these are relatively minor industries. We have some particular problems in agriculture and, I believe, private education and a couple of research sectors.

"There isn't any question now that we're going to have to bring these estimates into line with the national totals and we'll be coming back to some of you suggesting or recommending that we make certain adjustments to your agriculture figures in particular. I think in these cases where you feel you have a better figure, you can plug it into your particular matrix at a later date. I think we can do this without any problem at all. The minor problems we'll just prorate and give you back the estimates. The national matrix that we're going to use as a constraint matrix has been completed; it was finished several weeks ago and is presently available. "How big is it?" It's 201 industries by 427 occupations and 6 classes of worker categories. I multiplied it up and, lo and behold, it was 594,962 cells, about 90 percent of which are zero, I might add. That's still a lot of zeros.

"The next step in the process will be to bring all of the states matrices into consistency with the national matrix. At the moment we are a little hung up on that particular step of the process since we're so deeply involved in this projection project. If we do go ahead with it, we're thinking seriously of turning this particular problem over to Lawrence Berkeley lab. They seemed intrigued by the whole idea, and their computer is so enormous that they can swallow this thing in one large gulp and spit it out, whereas the Bureau's computer or the Department's computer probably would have to break it into a thousand pieces and do each separately. Now the remaining part of the state matrix package is the computer system. Since we've got the national matrix finished, the basic computer system is operational, it's completed and in our departmental computers. We have a draft operating manual for our own in-house use; it's documented and they are just starting on the documentation for outside implementation. We haven't yet rewritten the programs in order to fit the smaller computers; that particular project is delayed somewhat by this interim projection program. There is one module that isn't finished on the model but it's of no great consequence.

"Now, the interim projection project that we just embarked upon: As you know, you've received materials from us concerning setting up some data for running regressions. Since we don't have all the ends tied up on this program, you're going to be receiving, over the next few months, a number of communications. I think the next one will provide you with the formats for sending in your final industry estimates. There will be a series of these communications, that's the point I wanted to make. The national matrix for 1970 is completed. We have a large staff of handbook analysts now working on the individual projections of these occupational structures by industry. This we hope to be completed by the end of this month and in the hands of the Berkeley people for the processing.

"As most of you know, the death and retirement rates by state have already been completed. Many of you have them for your own particular use. If there are some who don't and wish them, just contact our regional office and I'm sure they'll be in contact with us for them.

"The Lawrence Berkeley Lab, as you know, has been contracted by the Manpower Administration to provide our data processing services. They will have a system operating out there very shortly, and hopefully, we will have all of these data that you've been transmitting to us back to you by the end of next week. We have a problem with the listings for the metropolitan areas of over a million regarding the basic census data that you need for this project, since the listing program isn't operational at Berkeley yet. We are going to get the data for major areas back and list them ourselves. You should be getting those within two weeks or so.

"Now as for the state inputs, I must say that your response has been most encouraging-in fact overwhelming. I've been digging in my basket every morning and pulling out piles of keypunch sheets, data that you've been sending. We're going to have an awful wealth of historical data on file someplace when all of this gets run. I counted the other day and something like 40 states have either already completed their projections or have sent information to us. There are a few states that we haven't heard from yet. There has been virtually complete cooperation from the states.

"Before I shift gears, I must mention what we will probably be doing in the immediate future. One is that we'll want to recycle the projections utilizing your individual matrices right away. I think the second thing we ought to do early next year is complete a 1973 national matrix, then I think we should immediately update all the state matrices to 1973. We could then follow this very shortly with a 1975 national matrix. I would guess too that probably by the end of next year we should have some guidelines established and a system worked out for developing the sub-state areas' matrices."

As mentioned in Mr. Dempsey's talk quoted above, the Manpower Administration contracted with the Lawrence Berkeley Laboratory to provide data processing services. These services included the production of three tables. The basic tables, containing unrounded estimates, were:

Table 1 - Total Employment by Industry
Table 2 - Total Employment by Occupation
Table 3 - Average Annual Job Openings

The tables were produced on the basis of a mechanical process and standardized data input and require caution in their interpretation and use. For instance, the occupational data derived in the Interim Manpower Projections Program are based upon 1970 Census occupational employment which have been projected to 1980 according to the industry employment projections for 1980 and estimated national staffing patterns changes from 1970 to 1980. Estimates of employment for 1975 and 1976 in tables 1, 2 and 3 are obtained by linear interpolation of 1970 and 1980 data. The projection method thus does not take into account cyclical, seasonal, and such exogenous factors as sudden and large plant openings or closings. Moreover, the national projections used in the development of the State and area projections do not reflect the potentially serious implications of the "energy crisis" and its effect on future employment. Although BLS is presently reviewing this question, no conclusive assessments are now available. Finally, the method assumes that the labor market area covered is self-contained and generally devoid of significant levels of commuting and migration.

The Bureau of Labor Statistics' national estimates for 1980 mentioned above are included in Appendix B of this report. They are consistent with the 1985 projections published in the December 1973 Monthly Labor Review.[3] The general assumptions on which the national projections to 1980 and 1985 are based are condensed below.

1. Fiscal, monetary and manpower training and educational programs will achieve a satisfactory balance between relatively low unemployment and relative price stability, permitting achievement of the long-term economic growth rate.

2. The institutional framework of the American economy will not change radically.

3. Economic, social, technological, and scientific trends will continue, including values placed on work, education, income, and leisure.

4. Efforts to solve major domestic problems such as those of air and water pollution, solid waste disposal, urban congestion, inadequate industrial safety and energy shortages may consume more productive resources but will not have more than a marginal effect on long-term economic growth.

The Manpower Resources Section of the Manpower Program Development Division, Employment Security Agency, Georgia Department of Labor prepared the historical data that was the basis for the projections and reviewed and adjusted the 1980 industry projections prior to application of the national staffing patterns. It also selected the manner of presentation and prepared the report for publication.

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1/ From "Guidelines for the Use and Analysis of Data Resulting from the Interim Manpower Projections Programs" draft version prepared by the U.S. Department of Labor, Manpower Administration, Office of Planning and Evaluation, April 1974.

2/ From a talk given by Dick Dempsey in a workshop panel entitled "The Occupational Employment Statistics Program and Manpower Data Needs" at the Fourth Annual Conference of Research Directors of Employment Security Agencies held in Portland, Oregon, in September 1973. The panel was chaired by Dudley E. Young of the National Bureau of Labor Statistics Office.

3/ See articles on "The United States Economy in 1985" beginning on pages 3, 8, 18 and 27 of the Monthly Labor Review, December 1973, published by the U.S. Department of Labor, Bureau of Labor Statistics.

# HIGHLIGHTS

## Population and Labor Force

Georgia added an average of 64,646 persons to its population each year during the 1960's with most of the gain being in the working-age population. Employment grew at a faster rate than the population during this period. As a result, the long-term flow of outmigration was reversed and the labor force participation rate increased.

Georgia population is expected to exceed 5,301,500 in 1980 after rising about 71,200 annually during the 1970's, according to projections prepared by the State Office of Planning and Budget. Half of the gain of approximately 712,000 from 1970 will be in the 25-44 age group. Declining birth rates will cause the 5-14 age group to actually drop during the 1970-80 decade, but other age groups are expected to record increases.

The civilian labor force is expected to expand 457,100 from 1970 to a total of 2,320,400, assuming an unemployment rate of 4.0 percent in 1980. The labor force participation rate for the civilian noninstitutional population 16 years old and over is expected to be 64.9 percent in 1980, compared to 62.2 percent in 1970.

## Industry Employment Trends

Total employment increased by 40,680 jobs a year for an annual growth rate of 2.6 percent from 1960 to 1970. The net gain of 406,800 jobs during the ten-year period boosted employment to an average of 1,787,300 in 1970. Employment will continue to grow to 1980 but at a slower rate. Employment is expected to add 44,050 jobs a year from 1970 to 1980 for an annual growth rate of 2.2 percent. This would put the 1980 total at 2,227,800.

All major industry divisions added workers between 1960 and 1970 except agriculture, forestry and fisheries which continued a long downtrend and lost 48,500 workers. Annual growth rates ranged from a low of 2.1 percent for mining -- the smallest major division -- to 4.7 percent for public administration. Because of the decline in agriculture, forestry and fisheries and greater growth rates in most service-producing industries than in mining and manufacturing, the proportion of all employed workers who were employed in goods-producing industries dropped from 41.6 percent in 1960 to 37.6 percent in 1970. The trend will continue, and by 1980 only 36 of every 100 workers will be employed in goods-producing industries, while 64 will be employed in services.

Factories employed 25.5 percent of Georgia's workers in 1960 with 8.0 percent of all workers employed in durable goods industries and 17.5 percent in nondurable goods. Manufacturing employment increased by 116,200 from 1960 to 1970 with substantial changes taking place in the industry mix. Lumber and wood products was the only major industry group to register a decline in this period. Annual increases during the 1960-1970 span in the durable goods industries ranged from 130 a year for furniture and fixtures to 2,140 a year for transportation equipment (aircraft, automobiles, railroad cars, mobile homes, ship and boat building and repair). Increases in nondurable goods industries ranged from only 110 a year in leather products to 1,510 in textile mill products and 2,250 in apparel.

Manufacturing employment is expected to show a net growth of 91,500 from 1970 to 1980 when 559,600 will be on factory jobs. The annual growth will be 9,150 jobs, or 1.8 percent a year, compared to the faster growth of 11,620 jobs and 2.9 percent during the 1960-1970 period. Transportation equipment, which had provided so much of the growth in the early '60's, is expected to decline because of completion of defense related contracts in the aircraft industry. Textile employment will gain at a slower rate than all employment. By 1980 factory employment's share of all employment will have dropped to 25.1 percent. Durable goods industries' share will be 8.8 percent of all employment. The proportion in nondurable goods industries will have declined to 16.3 percent of all employment.

Agriculture, forestry and fisheries employment will continue to decline from 1970 to 1980 but at a slower rate than in the earlier period. Mining will have the slowest growth of any expanding industry. The fastest growth rate will be in construction and finance, insurance and real estate.

## Occupational Employment Trends

Industry changes during the 1970's will have a strong influence on occupations which ones will grow and which will contract. Each industry in the economy requires a specific mix of occupations. As industries react to changes in final demand and in relation to each other, the relative importance of particular occupations also changes.

Beyond the effect of interindustry relationships, industry occupational structures are also affected by internal changes within industries. Just as technological advances that increase worker productivity have significantly affected employment and output, these advances significantly affected the occupational structure of the work force. As a result of technological innovations, new occupations have emerged; others have expanded, contracted, or even disappeared; and the content and skill requirements of a great many occupations have been altered. But technology and final demand are not the only factors affecting occupational shifts. Changes can occur as a result of revised work rules, new directions in governmental policy, and severe shortages that force substitutions in the kinds of workers hired.

Several long-term occupational trends 1/ are expected to continue:

> White-collar occupations, the fastest growing occupational group over the past 30 years, will continue in that mode. This group, which surpassed employment in blue-collar occupations in 1960, will account for almost half of all employed workers (47.9 percent) by 1980. Employment in these occupations will rise from 705,000 in 1970 to 952,400 in 1980.
>
> Blue-collar occupations, a slow-growing occupational group, will account for slightly more than one-third (37.7 percent) of employment in 1980. down from 39.2 percent in 1970. Employment, however, will rise from 622,300 to 749,500 in 1980. Many occupations within the group, particularly in the skilled craft and foreman category, require years of specialized training.

**Farm occupations** will continue to decline -- from 3.6 percent of employment in 1970 to 2.0 percent in 1980 -- as machines take over many more of the production processes on the farm. Employment will shrink from 57,100 to 39,500.

**Service occupations** will continue to expand in 1980, increasing by more than one-fifth. Employment will rise to 246,600, up from 203,400 in 1970.

## Manpower Requirements

For every 100 new jobs created by industrial expansion, 160 jobs will require replacement of workers because of deaths and retirements. This means that from 1970 to 1980 there will be 1,049,800 jobs to be filled. The occupational categories by volume of needs are listed in descending order:

Clerical and Kindred Workers (236,400)
Operatives and Kindred Workers (162,700)
Service Workers, including private household (160,600)
Professional, Technical and Kindred Workers (156,800)
Craftsmen, Foremen and Kindred Workers (109,100)
Managers, Officials and Proprietors (108,800)
Sales Workers (84,700)
Laborers, excluding Farm and Mine (28,500)
Farm Workers (2,200)

1/ Estimates are based on census data and are not fully comparable. 1970 estimates and 1980 projections are based on 1970 Census count from which "allocated" and "not specified" workers have been excluded. "Occupations not reported" have been excluded from data shown in 1960 Census reports.

## POPULATION AND CIVILIAN LABOR FORCE PROJECTIONS

Georgia's population is expected to increase about 71,200 annually from 1970 to reach a total of 5,301,537 in 1980, according to projections prepared by the State Office of Planning and Budget. About half of the gain is expected to occur among the group 25 to 44 years old. This group will grow from 24.4 percent of the population in 1970 to 27.9 percent in 1980. The group 20 to 24 years old will have 11 percent of the growth and will increase its proportion from 9.1 to 9.3 percent of the total.

Youth 15 to 19 years old will increase 25,849 numerically but the group will decline from 9.6 percent to 8.8 percent of the population. Declining birth rates will cause the group 5 to 15 years of age to decline 39,085 from 1970 to 912,150 in 1980. This group's proportion of the total will decrease from 20.7 to 17.2 percent. Both the number and the proportion of elderly persons 65 and over will increase.

### TABLE 1
### GEORGIA POPULATION BY SELECTED AGE GROUPS 1960 AND 1970 (ACTUAL) AND 1980 (PROJECTED)

| Age | 1960 Totals | 1960 % of Total | 1970 Totals | 1970 % of Total | 1980 Totals | 1980 % of Total |
|---|---|---|---|---|---|---|
| 0–4 | 471,901 | 12.0 | 421,709 | 9.2 | 548,559 | 10.3 |
| 5–14 | 851,848 | 21.6 | 951,235 | 20.7 | 912,150 | 17.2 |
| 15–19 | 331,554 | 8.4 | 442,571 | 9.6 | 468,420 | 8.8 |
| 20–24 | 271,211 | 6.9 | 416,949 | 9.1 | 495,616 | 9.3 |
| 25–44 | 1,013,165 | 25.7 | 1,121,859 | 24.4 | 1,478,443 | 27.9 |
| 45–64 | 712,776 | 18.1 | 867,794 | 18.9 | 919,222 | 17.3 |
| 65 + | 290,661 | 7.4 | 367,458 | 8.0 | 479,127 | 9.0 |
| **Total** | **3,943,116** | **100.0** | **4,589,575** | **100.0** | **5,301,537** | **100.0** |

Source: Georgia State Data Center, Office of Planning and Budget, County Population Projections, Georgia 1980, Table 1.

### TABLE 2
### GEORGIA POPULATION, DECENNIAL CHANGE FOR SELECTED AGE GROUPS 1960-70 (ACTUAL) AND 1970-80 (PROJECTED)

| Age | 1960 to 1970 Total Change | 1960 to 1970 % Change | 1970 to 1980 Total Change | 1970 to 1980 % Change |
|---|---|---|---|---|
| 0–4 | -50,192 | -10.6 | 126,850 | 30.1 |
| 5–14 | 99,387 | 11.7 | -39,085 | -4.1 |
| 15–19 | 111,017 | 33.5 | 25,849 | 5.8 |
| 20–24 | 145,738 | 53.7 | 78,667 | 18.9 |
| 25–44 | 108,694 | 10.7 | 356,584 | 31.8 |
| 45–64 | 155,018 | 21.7 | 51,428 | 5.9 |
| 65 + | 76,797 | 26.4 | 111,669 | 30.4 |
| **Total** | **646,459** | **16.4** | **711,962** | **15.5** |

Source: Georgia State Data Center, Office of Planning and Budget, County Population Projections, Georgia 1980, Table 2.

The labor force participation rate for the civilian noninstitutional population is expected to continue its long-term increase until 1976 but decline from 1976 to 1980. The 1980 rate of 64.9 percent will, however, remain above the 1970 rate of 62.2 percent.

### TABLE 3
### EMPLOYMENT STATUS OF CIVILIAN NONINSTITUTIONAL POPULATION 16 YEARS AND OVER, 1970 (ACTUAL) AND 1975, 1976 AND 1980 (PROJECTED)
(Estimates in thousands)

| Item | 1970 | 1975 | 1976 | 1980 |
|---|---|---|---|---|
| Civilian noninstitutional population 1/ | 2,995.7 | 3,286.4 | 3,344.5 | 3,577.0 |
| Civilian labor force | 1,863.3 | 2,191.9 | 2,237.6 | 2,320.4 |
| Participation rate | 62.2 | 66.7 | 66.9 | 64.9 |
| Employment 2/ | 1,787.3 | 2,007.5 | 2,051.6 | 2,227.7 |
| Unemployment 3/ | 76.0 | 184.4 | 186.0 | 92.7 |
| Percent of civilian labor force | 4.1 | 8.4 | 8.3 | 4.0 |

1/ 1970 count was derived from 1970 U.S. Census of Population, PC(1)-C12, Table 53, and excludes members of the Armed Forces and inmates of institutions who were 16 years old and over. The Georgia State Data Center (see population table) projection for the total population 15 years old and over for the 1970-80 period was interpolated to obtain 1975 and 1976 estimates for this category. The ratio of .93132 (obtained by dividing the 1970 civilian noninstitutional population 16 and over by the total population 15 and over) was then applied to obtain the 1975, 1976 and 1980 population shown in this table.

2/ The estimate for 1970, based on place of work, was developed from Georgia Department of Labor, Employment Security Agency records supplemented to include self-employed persons, unpaid family workers, private household workers, and persons with a job but not at work, and adjusted to exclude the secondary job of multiple job holders. (The 1970 estimate is slightly under the estimate of 1,790 thousand derived from the Current Population Survey.) The employment estimates for 1975 and 1976 are simple interpolations of the projected long-run (1970-80) labor market trend.

3/ The 1970 unemployment estimate was derived from the Current Population Survey. The 1975 and 1976 estimates were projected from Georgia Department of Labor, Employment Security Agency estimates for the first half of 1974 and are based on the assumption the Nation will be in a recession in 1975, with recovery beginning in 1976. The 1980 projection is based on an assumed unemployment rate of 4.0 percent of the civilian labor force in that year.

Relative labor force growth between men and women is expected to alter sharply in the last half of the 1970-80 decade. Nationally,[1] during 1960-72, women made up 60 percent of the net increase in the labor force; between 1972 and 1980, they are projected to account for only 46 percent of new growth. This anticipated slowdown is attributable to (1) the increase in the 25 to 34 year-old group, which has a lower labor force participation rate than the groups (under 25 and 35 to 54) which grew most rapidly in the 1960's, and (2) the assumed halt in the decline in women's fertility rates, which implies that increased labor force participation attributable to declining fertility will not be as evident over the coming years.

In the table showing projected employment status to 1980, it has been assumed that Georgia and the nation will be experiencing the effects of a business recession in 1975 and 1976 with full recovery by 1980. Georgia's assumed unemployment rates are 8.4 percent of the civilian labor force in 1975, 8.3 in 1976 and 4.0 in 1980. The employment levels shown are simple interpolations of the projected long-run employment trend.

Georgia has only recently been included among the states for which estimates of the civilian noninstitutional population and employment status by color, sex, and age are derived from the Current Population Survey (CPS). The only estimates published thus far are the 1973 annual averages which follow.

### TABLE 4
### EMPLOYMENT STATUS OF CIVILIAN NONINSTITUTIONAL POPULATION 16 YEARS AND OVER BY COLOR, SEX, AND AGE, 1973 ANNUAL AVERAGES
(Number in Thousands)

| Population Group | Civilian Noninstitutional Population | Civilian Labor Force | | Employment | Unemployment | |
|---|---|---|---|---|---|---|
| | | Number | Participation Rate | | Level | Rate |
| Total | 3,232 | 2,070 | 64.0 | 1,989 | 81 | 3.9 |
| White | 2,545 | 1,633 | 64.2 | 1,586 | 48 | 2.9 |
| Men, 20 years and over | 1,081 | 906 | 83.8 | 892 | 13 | 1.4 |
| Women, 20 years and over | 1,208 | 586 | 48.5 | 565 | 21 | 3.6 |
| Both sexes, 16-19 years | 255 | 142 | 55.7 | 128 | 13 | 9.2 |
| Negro and Other Races | 687 | 436 | 63.5 | 403 | 33 | 7.6 |
| Men, 20 years and over | 252 | 200 | 79.4 | 195 | 6 | 3.0 |
| Women, 20 years and over | 334 | 184 | 55.1 | 171 | 12 | 6.5 |
| Both sexes, 16-19 years | 102 | 51 | 50.0 | 36 | 15 | 29.4 |

Source: U.S. Department of Labor, Bureau of Labor Statistics, Report 431, Geographic Profile of Employment and Unemployment, 1973, Table 3.

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[1] U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, December 1973, "The United States Economy in 1985, Population and Labor Force Projections", p. 9.

## TOTAL EMPLOYMENT BY INDUSTRY

Industry employment as presented here differs in concept from that in the historical nonfarm wage and salary series that is published monthly by this Agency and annually by the U.S. Department of Labor, Bureau of Labor Statistics, in Employment and Earnings' States and Areas. The historical series includes only nonagricultural wage and salary workers. The 1970 estimates from which the 1980 projections were made were developed from Georgia Employment Security records and were supplemented to include self-employed persons, unpaid family workers, private household workers and persons with a job but not at work. The 1970 estimates were adjusted to exclude the secondary job of multiple job holders. The only comparable estimates for an earlier period are those for 1960 contained in Georgia Jobs for the Future, a report prepared by the Georgia Department of Labor, Employment Security Agency, which contained projections to 1975.

### Review of 1960-1974 Trends

Employment rose in most nonfarm industries and fell in agriculture in the 1960's. The policy of the National Administration, following the 1960-61 recession, was to spur the economy. Even after activities in the Vietnam War were sharply stepped up in the mid-60's, a policy of both "Guns and Butter" was pursued. Demand for war materiel and consumer goods and services rose. New manufacturing plants were built and existing plants were expanded in an effort to meet the demand. Employment in nonmanufacturing industries also rose. The failure of the federal government to adequately finance the war effort through increased taxation led to inflation.

In late 1969 Georgia and the nation entered a period of retarded economic growth due to the winding down of the Vietnam War and the policies of the Nixon Administration and of the Federal Reserve System designed to fight inflation. During this period of retarded growth, which lasted about two-and-a-half years, Georgia's nonfarm employment, both total and for nonmanufacturing, continued upward but at a much slower rate than the average for the 1960-70 decade. Agricultural employment continued its long-term downtrend and manufacturing employment declined. The factory-worker drop took place primarily in ordnance, the aircraft segment of transportation equipment, and in textiles. These industries had accounted for much of manufacturing gain in the 60's.

A series of measures taken by the Administration and the Federal Reserve System to bring about recovery from the 1969-70 recession resulted in further gains in nonfarm employment with manufacturing again sharing in the rise. However, inflation continued at increasing rates. In late 1973, Arab oil-producing states clamped an embargo against nations they considered friendly to Israel. Although the embargo was later lifted, the threat that it will be reimposed lingers. Both Arab and non-Arab oil-producing states have also greatly jacked-up the price at which they will sell oil to the United States and other countries. This helped to bring on what has been described as "slumpflation", a combination of deepening business decline side by side with relentlessly galloping inflation. 1/

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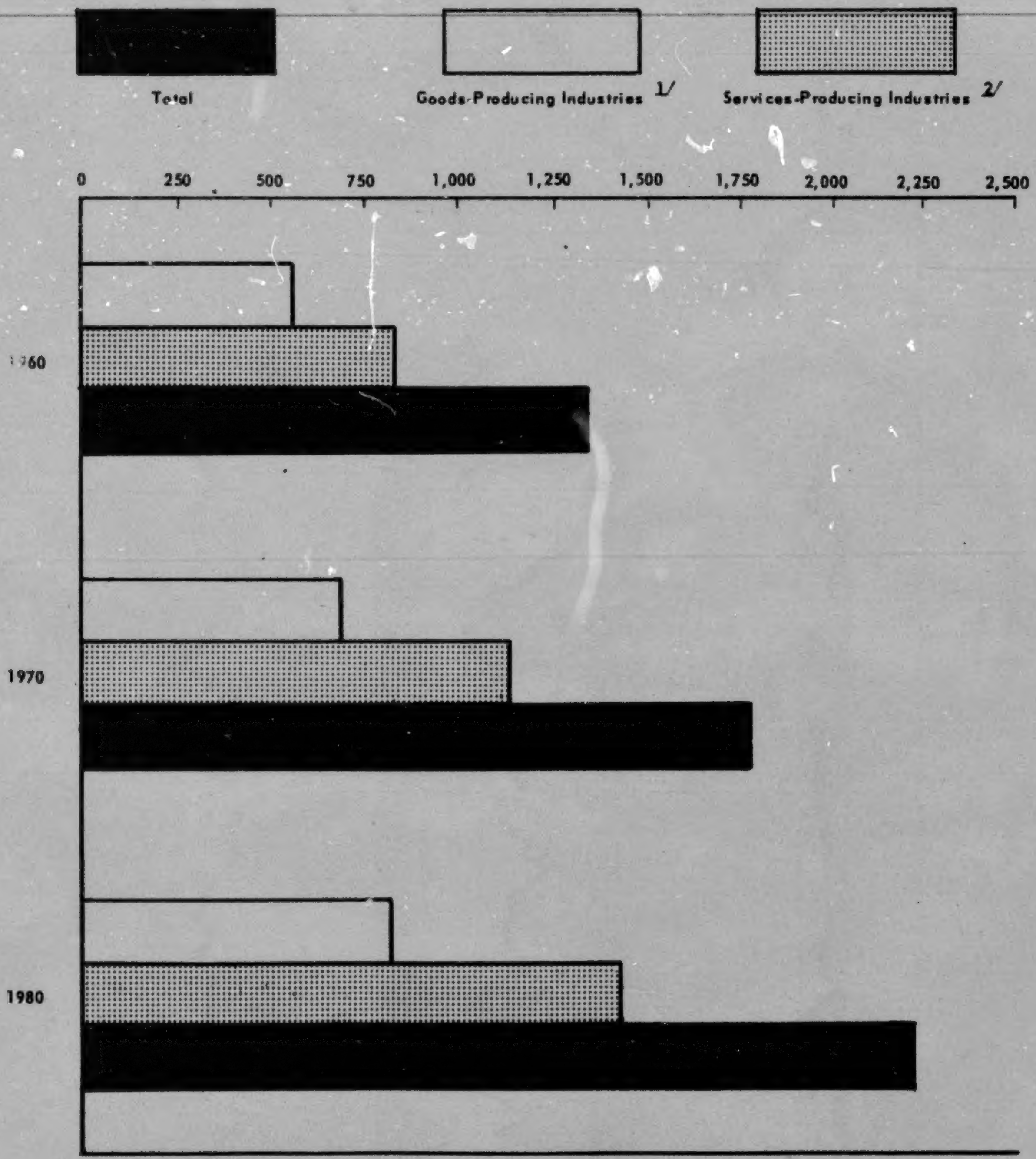
1/ The term "slumpflation" was taken from an article by Sylvia Porter, the New York financial columnist, in the Atlanta Journal, November 13, 1974.

## CHART 1
## EMPLOYMENT IN GEORGIA,
## TOTAL AND IN GOODS-PRODUCING AND SERVICES-PRODUCING INDUSTRIES
## 1960, 1970 AND PROJECTED 1980

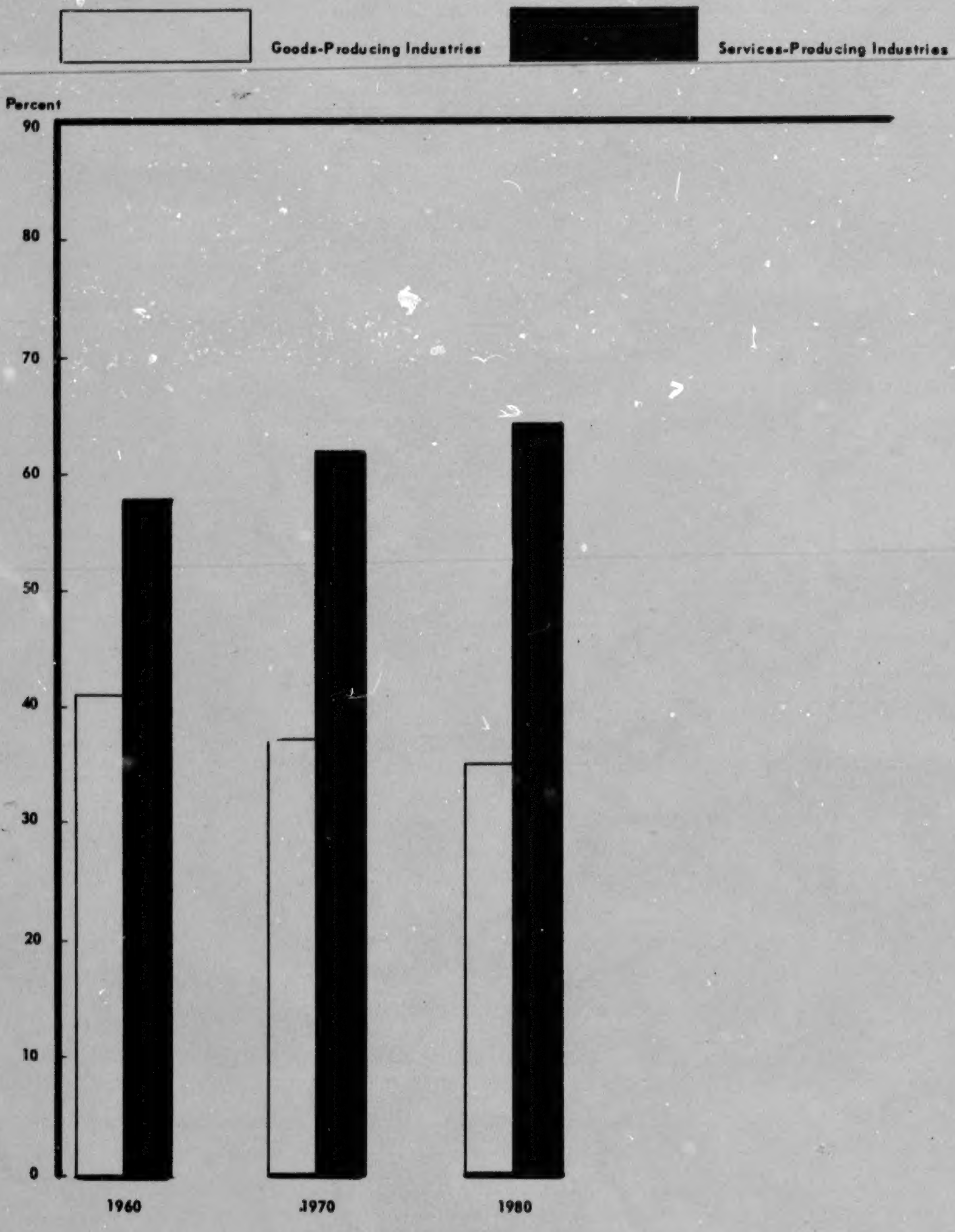


1/ Includes agriculture, forestry and fisheries; mining; construction; and manufacturing.

2/ Includes transportation, communication and public utilities; wholesale and retail trade; finance, insurance and real estate; services; and public administration.

Source of 1960 Data: Georgia Jobs for the Future, Table 4.

CHART 2
EMPLOYMENT IN GOODS-PRODUCING AND SERVICES-PRODUCING INDUSTRIES AS A PERCENT OF TOTAL EMPLOYMENT 1960, 1970 AND PROJECTED 1980



Source of 1960 Data: Georgia Jobs For the Future, Table 4.

The most dramatic change in industry employment in recent years has been the employment shift towards service-producing industries. Data in the 1940 Census showed that only about 4 in every 10 workers were in service industries. By 1950 the weight had shifted to just under 5 in every 10 in service industries. In 1970 more than 6 of every 10 of Georgia's 1,787,350 employed workers were in the service industries.

Employment in goods-producing industries slowed drastically between 1940 and 1950 and declined in 1960 because sharp reductions in agriculture, forestry and fisheries more than offset increases in manufacturing, construction and mining. Trends in the various goods-producing industries continued in the same direction between 1960 and 1970, but the group showed a gain of 98,600 workers because the drop of 48,500 in agriculture, forestry and fisheries was less than the increase of 147,100 in nonagricultural goods-producing industries.

## Projections to 1980

Employment projections to 1980 reflect additional changes expected in the industrial composition of the economy. The proportion of the total of almost 2,227,800 employed in 1980 that work in service-producing industries is expected to be about 6.4 of every 10 -- or 1,434,740. About 3.6 of every 10 workers -- or 793,010 -- will be employed in goods-producing industries in 1980.

TABLE 5
GEORGIA TOTAL EMPLOYMENT AND AVERAGE ANNUAL RATE OF CHANGE BY MAJOR SECTOR, 1960-70 (ACTUAL) AND 1970-80 (PROJECTED)

| | Employment (In Thousands) | | | Annual Average Rate of Change 2/ | |
|---|---|---|---|---|---|
| Major Industry Sector | 1960 1/ | 1970 | 1980 | 1960-70 | 1970-80 |
| Total Employment, All Industries | 1,380.5 | 1,787.3 | 2,227.8 | 2.6 | 2.2 |
| Agriculture, Forestry and Fisheries | 133.6 | 85.1 | 66.7 | -4.4 | -2.4 |
| Mining | 5.7 | 7.0 | 8.1 | 2.1 | 1.5 |
| Construction | 82.6 | 112.2 | 158.6 | 3.1 | 3.5 |
| Manufacturing | 351.9 | 468.1 | 559.6 | 2.9 | 1.8 |
| Durable | 110.3 | 159.5 | 196.9 | 3.8 | 2.1 |
| Nondurable | 241.6 | 308.6 | 362.7 | 2.5 | 1.6 |
| Transportation, Communications and Public Utilities | 87.4 | 116.8 | 149.5 | 2.9 | 2.5 |
| Trade, Wholesale and Retail | 269.8 | 366.3 | 481.7 | 3.1 | 2.8 |
| Finance, Insurance and Real Estate | 55.0 | 83.1 | 112.7 | 4.2 | 3.1 |
| Services (including private and household) | 329.3 | 445.5 | 563.7 | 3.1 | 2.4 |
| Public Administration | 65.2 | 103.2 | 127.2 | 4.7 | 2.1 |

1/ From Georgia Jobs for the Future, Industries and Occupations, 1960-1967-1975, a report published by the Georgia Department of Labor, Employment Security Agency.

2/ Compound interest rate between terminal years.

## CHART 3
## TOTAL EMPLOYMENT: AVERAGE ANNUAL RATE OF CHANGE, 1/ BY MAJOR SECTOR, 1960-70 (ACTUAL) AND 1970-80 (PROJECTED

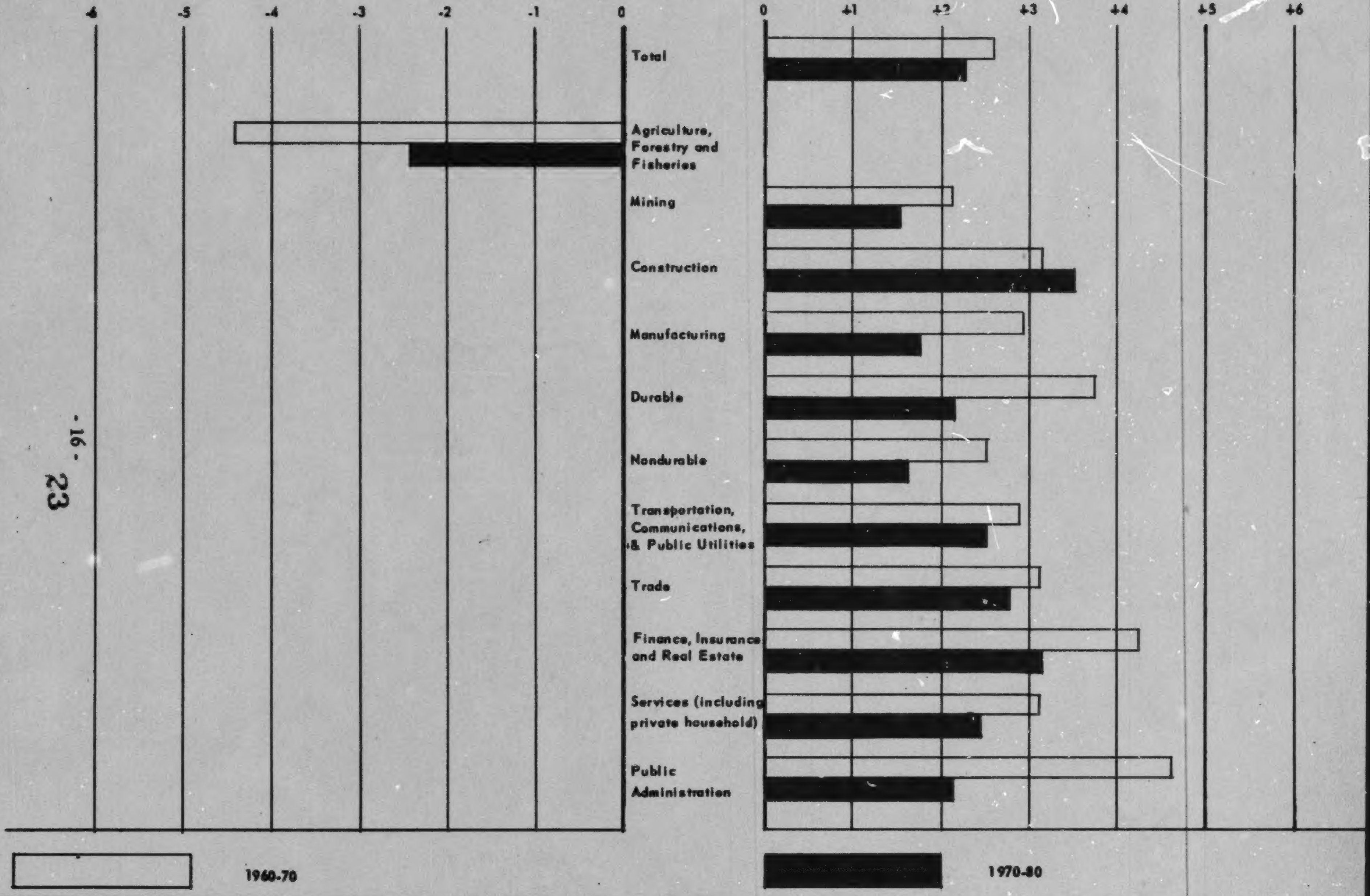


Chart 3 and Table 5 show average annual rate of change by major sector from 1960 to 1970 and the projected rate from 1970 to 1980. All of the major nonfarm sectors shown are expected to have smaller average growth rates than during the 1960-70 decade except construction which is projected to show a higher rate. The rate of decline for agriculture, forestry and fisheries is expected to be less in the 1970-80 period.

A discussion of projected change in employment levels as shown in Table 6 follows. Employment is rounded to ten's and percent change figures have been rounded to whole numbers. (See Appendix A for more detail for Georgia and Appendix B for national projections.)

## Goods-Producing Industries

**Agriculture, Forestry and Fisheries**. Employment is expected to continue to decline, dropping by 18,400 or 22 percent to 66,700. The proportion of all employment will drop from 4.8 percent in 1970 to 3.0. The national expectation is that even though worldwide demand for this nation's agricultural products will increase, the need for farm workers will decline because of rising productivity on farms. However, if less productive land is planted because of the increased demand for foodstuffs and if there are shortages of fertilizer, insecticides and other agricultural chemicals and of truck and tractor fuel as a result of an energy crisis, productivity could decline. The weather is another unknown factor in agricultural productivity.

**Mining**. Employment has increased slightly during recent years, primarily in metal mining and in nonmetallic mining and quarrying, but this has remained the smallest industry division in the state. Employment is expected to rise from 7,020 in 1970 to 8,150 in 1980. As a proportion of total employment, mining is expected to remain at 0.4 percent. Future employment growth will be limited by the increasing use of new and improved labor-saving devices and techniques.

**Construction**. Employment is expected to increase 41 percent to 158,570. Construction's share of all employment is expected to rise from 6.3 percent to 7.1. Much of the increase will be due to construction of transportation facilities and expansions of utilities. Probably the most expensive project in the State's history is scheduled to start in the last half of this decade -- the $1.7 billion Metropolitan Atlanta Rapid Transit Authority's 50-mile rapid rail system. The MARTA construction is expected to result in the generation of as much as $50 billion in new commercial and high-density residential construction in Fulton and DeKalb Counties.

**Manufacturing**. Manufacturing employment had supplanted agricultural employment as the largest single source of jobs in the State's economy by 1950, according to Census of Population data, and remained as the biggest industry division in 1970. It will continue to grow but by 1980 will be surpassed by the services division, including domestics and health and educational services. Manpower requirements in manufacturing will increase at a slower pace, at 1.8 percent a year, than that experienced during the 1960-70 period, chiefly because the increases in employment in the '60's in industries heavily oriented toward defense (aircraft and parts, ordnance, etc.) are not expected to continue at the same pace. Total manufacturing employment, however, will rise from 468,130 in 1970 to 559,590 in 1980.

As in the past, changes in employment in individual manufacturing industries are expected to vary widely, depending on the impact of technology as well as shifts in demand. The increasing application of technological innovations to manufacturing processes is expected to continue to reduce unit labor requirements in manufacturing. Major technological developments that will continue to limit growth in manufacturing employment include numerical control of machine tools, new metal processing methods, machinery improvements, improved materials handling (including layout), new and improved raw materials and products, instrumentation and automatic controls, and electronic computers.

Employment in durable goods industries is expected to increase 23 percent from 1970 to 196,850 in 1980. The proportion of all workers employed in durable goods is expected to decline from 8.9 percent to 8.8. All major durable goods groups except ordnance and transportation equipment should record a 10-year employment gain. Ordnance has almost completely phased out since the United States became disengaged from the Vietnam War. Transportation equipment employment is expected to be down 4,840 by 1980 due to losses in aircraft manufacturing that took place in the early part of the Post-Vietnam Era. Employment in motor vehicle and mobile home manufacturing is expected to show substantial gains from 1970 but the expected increases could be wiped out if energy shortages should be severe in the last half of the 70's.

Nondurable goods industries are expected to show an increase from 1970 of 54,090 or 18 percent. All major groups except leather and leather products are expected to increase in this period. The greatest numerical increases are projected for food, textiles, apparel, and rubber and miscellaneous plastic products. At this writing, however, the textile industry is experiencing cutbacks because of less demand for floorcovering due to a depressed construction industry and because of shortages of manmade fibers due to the energy crisis. The prospect for rubber and plastics could be dimmed also by shortages of petroleum and by pollution problems.

## Service-Producing Industries

Transportation, Communications and Public Utilities. Employment in this industry division is expected to increase to 149,470 in 1980, up from 116,750 in 1970. Its share of total employment is expected to rise from 6.5 percent in 1970 to 6.7 percent in 1980. Gains in local and interurban passenger transit; trucking and warehousing; air transportation; telephone communications, electric, gas and sanitary services and most other industries should more than offset continued declines in railroads and telegraph and miscellaneous communications.

Trade. Wholesale and retail trade, the second largest of the service industries, is interwoven throughout the economic system in a network of wholesale and retail establishments. Trade employment changes are expected to parallel those of the whole economy. At 481,680 in 1980, trade will be up 32 percent from 1970. Trade's relative share of total employment will be up slightly -- from 20.5 percent in 1970 to 21.6 percent in 1980.

Wholesale trade employment will increase more rapidly than retail employment, rising 35 percent from 1970 to 136,460 in 1980. Employment in motor vehicles and automotive equipment; drugs and chemicals; electric, hardware and plumbing goods; and machinery and equipment will be among the faster growing areas. The projection for motor vehicles assumes, of course, there will be adequate supplies of fuel to power vehicles.

The anticipated expansion of retail trade is expected to increase the need for sales workers, while changing techniques in merchandising are expected to hold down some of the increase. Retail trade is expected to be up 30 percent from 1970 to a total of 345,220 in 1980. The expansion will be most rapid in general merchandise stores and eating and drinking places.

**Finance, Insurance and Real Estate.** Employment in these industries is expected to increase at a faster rate to 1980 than total employment and to account for a slightly larger share -- 5.1 percent -- in 1980 than in 1970. Employment will rise from 83,130 to 112,730. The fastest gains will be in finance, although advancing automation will eliminate some clerical functions in banking institutions. Insurance employment will be constrained somewhat by the computerization of recordkeeping functions but will continue to grow with the rising population. Real estate employment will also continue to grow; it is little affected by technological advances but is highly responsive to the rising number of family formations.

**Services.** Employment in this heterogenous group of service industries, which includes personal, business, health and educational services, underwent a rapid expansion in the sixties and is expected to be somewhat slower in the seventies. The growth rate would be higher if private households were not included. The service group will still grow at a slightly faster rate than total employment despite an expected substantial decline in private households. Employment in service industries will rise from 445,490 in 1970 to 563,700 in 1980. The service group's share of all employment will increase from 24.9 percent to 25.3.

The employment growth in the service industries will be related to a substantial increase in population, a rapid rise in personal disposable income, expanding economic activity, and a growing demand for medical, educational and other services. The output of these labor-intensive industries is less affected by technological change than many other industries, hence their employment growth is not restrained very much by productivity advances.

Within the services division, employment is expected in all major industries except private households and motion picture theaters. Growth in hotels and lodging places is expected to be particularly rapid, especially in Atlanta which has become one of the nation's leading convention cities and where a World Trade Center is to be constructed. Growth in business services also will be rapid as firms rely increasingly on advertising services to sell their products; on accounting, auditing, bookkeeping, and computing services to handle their recordkeeping; on contract firms to provide maintenance service; and on audit bureaus and collection agencies to cope with mushrooming consumer credit.

**Public Administration.** (Government workers engaged in activities unique to government are classified as public administration; those engaged in activities also carried on by private enterprises, such as construction, manufacturing, transportation, medical and educational services, etc., are classified in the appropriate industry.)

Employment grew faster in the sixties in public administration than in any other major sector. From 1960 to 1970 public administration employment grew 4.7 percent a year, compared to only 2.6 percent for total employment. The sharp rise was stimulated by the needs of the Vietnam War as well as by the rapid growth in population, the increasing proportion of young and of old persons who require more services, and the general growth in demand for more and better government services. Now that the United States has disengaged its troops from the Vietnam War, employment is expected to rise more slowly. All levels of government will expand efforts to meet a variety of domestic needs, but State and local government activity will grow relative to Federal activity.

The total growth in public administration for the 1970-80 period is expected to be 23,920 which will boost public administration employment to a level of 127,160. Employment among postal workers will rise 980 to 14,040 but other federal public administration will decline 140 to 54,110. State public administration employment is expected to increase 3,640 to 10,400. Local public administration employment is expected to expand by 19,440 from 1970 to 44,130 in 1980.

### TABLE 6

### GEORGIA TOTAL EMPLOYMENT BY INDUSTRY GROUP, 1970 AND PROJECTED TO 1980 1/

| Industry Group | 1970 Employment<br>Number | 1970 Employment<br>Percent 2/ | Projected 1980 Employment<br>Number | Projected 1980 Employment<br>Percent 2/ | 19<br>Absol |
|---|---|---|---|---|---|
| **Total, All Industries 3/** | 1,787,350 | 100.0 | 2,227,750 | 100.0 | 440, |
| **Agriculture, Forestry and Fisheries** | 85,140 | 4.8 | 66,700 | 3.0 | -18, |
| Agriculture | 81,550 | 4.6 | 62,540 | 2.8 | -19, |
| Forestry | 3,010 | 0.2 | 3,540 | 0.2 | 5 |
| Fisheries | 580 | * | 620 | * | |
| **Mining 4/** | 7,020 | 0.4 | 8,150 | 0.4 | 1, |
| Metal mining | 330 | * | 540 | * | 2 |
| Nonmetallic mining and quarrying | 6,600 | 0.4 | 7,430 | 0.3 | 8 |
| **Construction** | 112,180 | 6.3 | 158,570 | 7.1 | 46, |
| General building contractors | 30,010 | 1.7 | 44,050 | 2.0 | 14, |
| General contractors, except building | 33,410 | 1.9 | 46,330 | 2.1 | 12, |
| Special trade contractors | 48,760 | 2.7 | 68,190 | 3.1 | 19, |
| **Manufacturing** | 468,130 | 26.2 | 559,590 | 25.1 | 91, |
| Durable goods | 159,480 | 8.9 | 196,850 | 8.8 | 37, |
| Nondurable goods | 308,650 | 17.3 | 362,740 | 16.3 | 54, |
| **Transportation and Public Utilities** | 116,750 | 6.5 | 149,470 | 6.7 | 32, |
| Transportation | 66,560 | 3.7 | 82,980 | 3.7 | 16, |
| Communications | 25,760 | 1.4 | 34,040 | 1.5 | 8, |
| Electric, gas and sanitary services | 24,430 | 1.4 | 32,450 | 1.5 | 8, |
| **Trade** | 366,270 | 20.5 | 481,680 | 21.6 | 115, |
| Wholesale | 101,040 | 5.7 | 136,460 | 6.1 | 35, |
| Retail | 265,230 | 14.8 | 345,220 | 15.5 | 79, |
| **Finance, Insurance and Real Estate** | 83,130 | 4.7 | 112,730 | 5.1 | 29, |
| Finance | 35,600 | 2.0 | 55,780 | 2.5 | 20, |
| Insurance | 29,510 | 1.7 | 35.830 | 1.6 | 6, |
| Real estate and combinations of real estate, insurance, loan and law offices | 18,020 | 1.0 | 21,120 | 1.0 | 3, |
| **Services 4/** | 445,490 | 24.9 | 563,700 | 25.3 | 118, |
| Hotels and lodging places | 18,170 | 1.0 | 27,010 | 1.2 | 8, |
| Other personal services | 33,720 | 1.9 | 38,100 | 1.7 | 4, |
| Miscellaneous business services | 26,880 | 1.5 | 39,740 | 1.8 | 12, |

### TABLE 6
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY GROUP, 1970 AND PROJECTED TO 1980 1/

|  | 1970 Employment |  | Projected 1980 Employment |  | Change 1970 – 1980 |  |
|---|---|---|---|---|---|---|
|  | Number | Percent 2/ | Number | Percent 2/ | Absolute | Percent 2/ |
| 3/ | 1,787,350 | 100.0 | 2,227,750 | 100.0 | 440,400 | 25 |
| and Fisheries | 85,140 | 4.8 | 66,700 | 3.0 | -18,440 | -22 |
|  | 81,550 | 4.6 | 62,540 | 2.8 | -19,010 | -23 |
|  | 3,010 | 0.2 | 3,540 | 0.2 | 530 | 18 |
|  | 580 | * | 620 | * | 40 | 7 |
|  | 7,020 | 0.4 | 8,150 | 0.4 | 1,130 | 16 |
|  | 330 | * | 540 | * | 210 | 65 |
| and quarrying | 6,600 | 0.4 | 7,430 | 0.3 | 830 | 13 |
|  | 112,180 | 6.3 | 158,570 | 7.1 | 46,390 | 41 |
| ontractors | 30,010 | 1.7 | 44,050 | 2.0 | 14,040 | 47 |
| s, except building | 33,410 | 1.9 | 46,330 | 2.1 | 12,920 | 39 |
| ractors | 48,760 | 2.7 | 68,190 | 3.1 | 19,430 | 40 |
|  | 468,130 | 26.2 | 559,590 | 25.1 | 91,460 | 20 |
|  | 159,480 | 8.9 | 196,850 | 8.8 | 37,370 | 23 |
|  | 308,650 | 17.3 | 362,740 | 16.3 | 54,090 | 18 |
| blic Utilities | 116,750 | 6.5 | 149,470 | 6.7 | 32,720 | 28 |
|  | 66,560 | 3.7 | 82,980 | 3.7 | 16,420 | 25 |
|  | 25,760 | 1.4 | 34,040 | 1.5 | 8,280 | 32 |
| anitary services | 24,430 | 1.4 | 32,450 | 1.5 | 8,020 | 33 |
|  | 366,270 | 20.5 | 481,680 | 21.6 | 115,410 | 32 |
|  | 101,040 | 5.7 | 136,460 | 6.1 | 35,420 | 35 |
|  | 265,230 | 14.8 | 345,220 | 15.5 | 79,990 | 30 |
| d Real Estate | 83,130 | 4.7 | 112,730 | 5.1 | 29,600 | 36 |
|  | 35,600 | 2.0 | 55,780 | 2.5 | 20,180 | 57 |
|  | 29,510 | 1.7 | 35,830 | 1.6 | 6,320 | 21 |
| mbinations of real estate, and law offices | 18,020 | 1.0 | 21,120 | 1.0 | 3,100 | 17 |
|  | 445,490 | 24.9 | 563,700 | 25.3 | 118,210 | 27 |
| places | 18,170 | 1.0 | 27,010 | 1.2 | 8,840 | 49 |
| ices | 33,720 | 1.9 | 38,100 | 1.7 | 4,380 | 13 |
| ness services | 26,880 | 1.5 | 39,740 | 1.8 | 12,860 | 48 |

## TABLE 6 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY GROUP, 1970 AND PROJECTED TO 1980 1/

| Industry Group | 1970 Employment Number | 1970 Employment Percent 2/ | Projected 1980 Employment Number | Projected 1980 Employment Percent 2/ | Absol |
|---|---|---|---|---|---|
| Automobile repair services | 12,810 | 0.7 | 14,710 | 0.7 | 1,90 |
| Other repair services | 6,740 | 0.4 | 7,660 | 0.3 | 92 |
| Motion pictures, theaters | 3,710 | 0.2 | 3,660 | 0.2 | -5 |
| Miscellaneous entertainment | 6,970 | 0.4 | 9,570 | 0.4 | 2,60 |
| Medical and other health services | 86,840 | 4.9 | 124,750 | 5.6 | 37,91 |
| Legal services | 6,450 | 0.4 | 8,040 | 0.4 | 1,59 |
| Educational services | 118,600 | 6.6 | 167,360 | 7.5 | 48,76 |
| Nonprofit organizations | 26,440 | 1.5 | 36,570 | 1.6 | 10,13 |
| Private households | 85,300 | 4.8 | 69,070 | 3.1 | -16,23 |
| Other professional and related services | 12,770 | 0.7 | 17,350 | 0.8 | 4,58 |
| **Public Administration 5/** | 103,240 | 5.8 | 127,160 | 5.7 | 23,92 |
| Federal | 68,150 | 3.8 | 68,990 | 3.1 | 84 |
| State | 10,400 | 0.6 | 14,040 | 0.6 | 3,64 |
| Local | 24,690 | 1.4 | 44,130 | 2.0 | 19,44 |

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1/ This table summarizes information found in greater detail in Appendix Table 1. Estimates were rounded to ten's.

2/ Percents were computed from unrounded data. Percent change figures are shown as whole numbers.

3/ The 1970 and 1980 "Total, All Industries" employment in Table 6 and the "Total, All Occupations" employment shown in Table 11 d
was developed from different data sources. The 1970 occupational employment levels are those reported in the 1970 decennial census
and are based on place of residence. The 1970 industry employment estimates, based on place of work, were developed from Georgia D
Labor, Employment Security Agency records, supplemented to include self-employed persons, unpaid family workers, private household
with a job but not at work, and adjusted to exclude the secondary job of multiple job holders.

4/ Data were withheld from some of the components of this industry because of either smallness of size (less than 100 workers in 1970) o
avoid disclosure of individual establishment data; therefore, the sum of data for the listed components does not equal the industry tota

5/ Includes public administration only. Government agencies engaged in educational and medical services and in activities commonly ca
private enterprises, such as agriculture, construction, transportation, etc., are classified in their appropriate industry.

* Denotes less than 0.05.

## TABLE 6 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY GROUP, 1970 AND PROJECTED TO 1980 1/

| | 1970 Employment | | Projected 1980 Employment | | Change 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number | Percent 2/ | Number | Percent 2/ | Absolute | Percent 2/ |
| ir services | 12,810 | 0.7 | 14,710 | 0.7 | 1,900 | 15 |
| vices | 6,740 | 0.4 | 7,660 | 0.3 | 920 | 14 |
| theaters | 3,710 | 0.2 | 3,660 | 0.2 | -50 | -1 |
| ntertainment | 6,970 | 0.4 | 9,570 | 0.4 | 2,600 | 37 |
| er health services | 86,840 | 4.9 | 124,750 | 5.6 | 37,910 | 44 |
| | 6,450 | 0.4 | 8,040 | 0.4 | 1,590 | 25 |
| vices | 118,600 | 6.6 | 167,360 | 7.5 | 48,760 | 41 |
| zations | 26,440 | 1.5 | 36,570 | 1.6 | 10,130 | 38 |
| lds | 85,300 | 4.8 | 69,070 | 3.1 | -16,230 | -19 |
| al and related services | 12,770 | 0.7 | 17,350 | 0.8 | 4,580 | 36 |
| on 5/ | 103,240 | 5.8 | 127,160 | 5.7 | 23,920 | 23 |
| | 68,150 | 3.8 | 68,990 | 3.1 | 840 | 1 |
| | 10,400 | 0.6 | 14,040 | 0.6 | 3,640 | 35 |
| | 24,690 | 1.4 | 44,130 | 2.0 | 19,440 | 79 |

---

marizes information found in greater detail in Appendix Table 1. Estimates were rounded to ten's.

computed from unrounded data. Percent change figures are shown as whole numbers.

980 "Total, All Industries" employment in Table 6 and the "Total, All Occupations" employment shown in Table 11 differ because each
from different data sources. The 1970 occupational employment levels are those reported in the 1970 decennial census (after rounding)
n place of residence. The 1970 industry employment estimates, based on place of work, were developed from Georgia Department of
ent Security Agency records, supplemented to include self-employed persons, unpaid family workers, private household workers, and persons
ot at work, and adjusted to exclude the secondary job of multiple job holders.

eld from some of the components of this industry because of either smallness of size (less than 100 workers in 1970) or in order to
e of individual establishment data; therefore, the sum of data for the listed components does not equal the industry total.

administration only. Government agencies engaged in educational and medical services and in activities commonly carried on by
es, such as agriculture, construction, transportation, etc., are classified in their appropriate industry.

0.05.

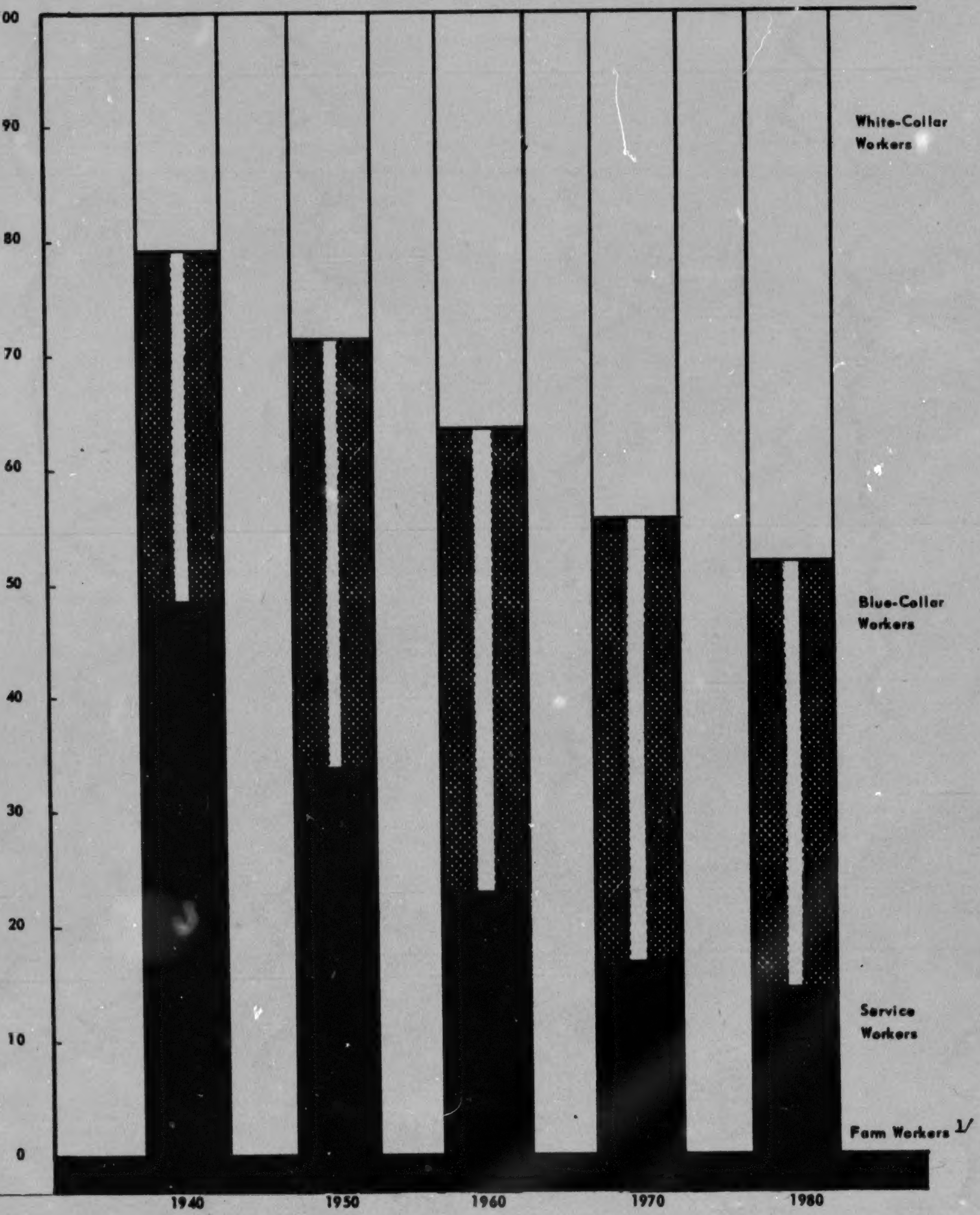
## EMPLOYMENT BY OCCUPATION

Total employment for all occupations as shown in this section differs from the total for all industries shown in the preceding section because estimates for the two categories were developed from different data sources. The 1970 industry employment estimates were developed from Georgia Employment Security records, supplemented to include self-employed, unpaid family and private household workers and persons with a job but not at work, and adjusted to exclude the secondary job of multiple job holders. Actual occupational employment levels shown are those reported in the decennial censuses of 1970 and 1960, excluding "allocated" and "not specified" cases the Bureau of the Census had included in the 1970 Census and the "occupations not reported" that were included in the 1960 Census. Because of the exclusions cited above, the 1970 total for all occupations of 1,587,797 was 158,972 under the figure of 1,746,769 reported in the census.

### 1940 - 1970 Trends

Revised data from the 1940 and 1950 censuses were published in 1960 census volumes. The data in the 1960 and 1970 census publications show consistent trends for two of the four major occupational classifications, with white-collar workers increasing and farm workers steadily declining as a proportion of all employment. White-collar workers advanced from 20.9 percent in 1940 to 44.4 percent of all employment in 1970. Farm workers declined from 34.4 percent in 1940 to only 3.6 percent in 1970. Employment of blue-collar workers increased from 30.2 percent in 1940 to 40.6 in 1960, then declined slightly to 39.2 percent in 1970 (the decline could have been due to under-reporting of nonfarm laborers). Service workers, with divergent trends for private household workers and other service workers, see-sawed. The service percentage dipped from 14.5 in 1940 to 12.4 in 1950, climbed to 14.6 in 1960, and dropped back to 12.8 in 1970.

## CHART 4
## EMPLOYMENT TRENDS AMONG MAJOR OCCUPATIONAL CATEGORIES, 1940-70 (ACTUAL) AND 1980 (PROJECTED)



1/ Farm workers include farm managers.

Source: for 1940-70: Percents were computed from census of population data that excluded "occupations not reported" (1940-60) and for 1970 "allocated" and "not specified" cases. 1940-60 data include persons 14 years old and over; 1970 includes persons 16 and over.

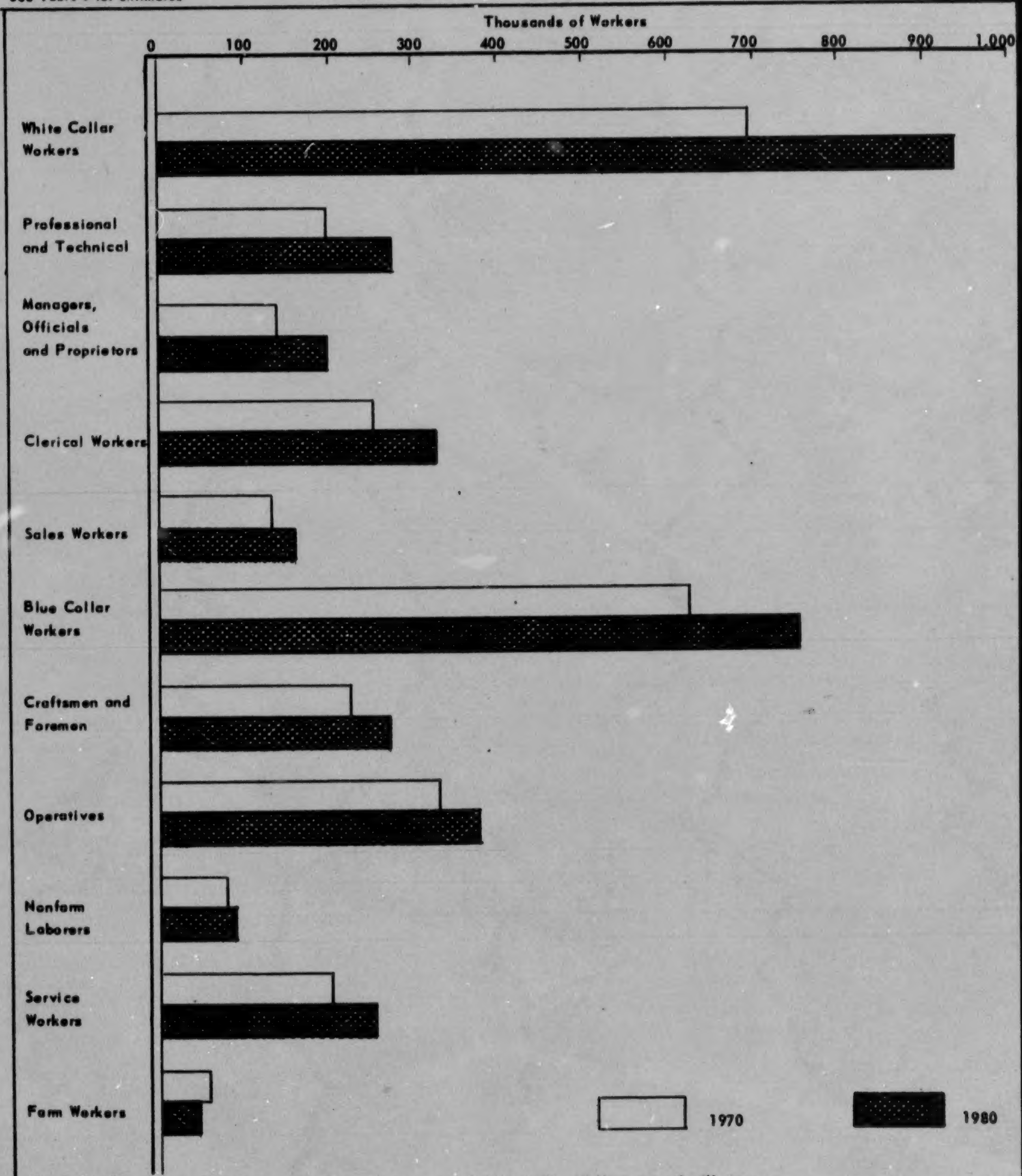
# PERCENTS FOR 1940-80 OCCUPATIONAL CATEGORIES

| Category | 1940 | 1950 | 1960 | 1970 | 1980 |
|---|---|---|---|---|---|
| Total* | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| White-Collar | 20.9 | 28.3 | 36.4 | 44.4 | 47.9 |
| Blue-Collar | 30.2 | 38.1 | 40.6 | 39.2 | 37.7 |
| Service Workers | 14.5 | 12.4 | 14.6 | 12.8 | 12.4 |
| Farm Workers | 34.4 | 21.2 | 8.4 | 3.6 | 2.0 |

*Excludes "occupations not reported" for 1940-60 and "allocated" and "not specified" for 1970.

## CHART 5
## EMPLOYMENT IN MAJOR OCCUPATIONAL GROUPS, 1970 (ACTUAL) AND 1980 (PROJECTED)

See Table 8 for estimates



Source of Base Data: 1970 Decennial Census. Excludes "allocated" and "not specified" cases.

## Projected Changes in Occupations*

Total employment is expected to increase about a quarter between 1970 and 1980, going from 1,587,800 to 1,988,000 (based on 1970 census count of employed persons from which "allocated" and "not specified" workers have been excluded). Expected changes for major occupational classifications are shown below.

### TABLE 7
### EXPECTED CHANGES IN MAJOR OCCUPATIONAL CLASSIFICATIONS, 1970-80

| Classification | 1970 Number of Jobs (In Thousands) | 1970 Percent | 1980 Number of Jobs (In Thousands) | 1980 Percent | Percent Change 1970-80 |
|---|---|---|---|---|---|
| **Total Employment 1/** | **1,587.8** | **100.0** | **1,988.0** | **100.0** | **25** |
| White-Collar Workers | 705.0 | 44.4 | 952.4 | 47.9 | 35 |
| Blue-Collar Workers | 622.3 | 39.2 | 749.5 | 37.7 | 20 |
| Service Workers | 203.4 | 12.8 | 246.6 | 12.4 | 21 |
| Farm Workers | 57.1 | 3.6 | 39.5 | 2.0 | -31 |

1/ Excludes "allocated" and "not specified" workers who had been included in the 1970 Census total.

Most of the 1960-70 trends in the employment of white-collar, blue-collar, service, and farm workers are expected to continue to 1980, but some important changes will occur in the mix of occupations within these broad categories. Technological changes will cause employment to increase in some occupations and to decrease in others. The spread of the computer will continue to be a notable example of this. Also, differences in industrial growth will boost some occupations (for example, those in the health field); while others grow more slowly than in the recent past (the educational field) and still others continue to decline relatively (farm and private household jobs). Another phenomenom, national in scope, is a potential supply that is greater than potential requirements for college graduates beginning in the late 1970's in jobs traditionally held by these workers.

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*This section depends heavily on the explanation of reasons for projected national changes detailed in "The United States Economy in 1985, Projected Changes in Occupations", by Neal H. Rosenthal, pp. 18-26 of the December 1973 edition of the Monthly Labor Review. Where the wording in this article fits conditions in Georgia, it has been incorporated unchanged in this report.

## TABLE 8
## EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP, 1960 AND 1970 AND PROJECTED 1980
(In Thousands)

| Occupational Group | 1960 | 1970 | 1980 |
|---|---|---|---|
| Total 1/ | 1,336.4 | 1,587.8 | 1,988.0 |
| White-Collar Workers | 487.0 | 705.0 | 952.4 |
| Professional and technical workers | 117.6 | 199.5 | 269.5 |
| Managers and administrators | 115.2 | 141.6 | 202.1 |
| Sales workers | 91.9 | 114.2 | 150.4 |
| Clerical workers | 162.3 | 249.7 | 330.4 |
| Blue-Collar Workers | 542.3 | 622.3 | 749.5 |
| Craftsmen and kindred workers | 161.4 | 225.6 | 288.2 |
| Operatives 2/ | 295.1 | 323.3 | 376.7 |
| Nonfarm laborers | 85.8 | 73.4 | 84.6 |
| Service Workers | 194.4 | 203.4 | 246.6 |
| Private household workers | 87.5 | 50.4 | 41.8 |
| Other service workers | 106.9 | 153.0 | 204.8 |
| Farm Workers | 112.7 | 57.1 | 39.5 |

1/ Excludes "occupations not reported" from 1960 census and "allocated" and "not specified" from 1970 census data. 1960 census includes persons 14 years old and over.

2/ Includes the 1970 census classifications, "operatives, except transport", and "transport equipment operatives".

## TABLE 9
## PERCENT DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP, 1960 AND 1970 AND PROJECTED 1980

| Occupational Group | 1960 | 1970 | 1980 |
|---|---|---|---|
| **Total** 1/ | 100.0 | 100.0 | 100.0 |
| **White-Collar Workers** | 36.4 | 44.4 | 47.9 |
| Professional and technical workers | 8.8 | 12.6 | 13.6 |
| Managers and administrators | 8.6 | 8.9 | 10.2 |
| Sales workers | 6.9 | 7.2 | 7.6 |
| Clerical workers | 12.1 | 15.7 | 16.6 |
| **Blue-Collar Workers** | 40.6 | 39.2 | 37.7 |
| Craftsmen and kindred workers | 12.1 | 14.2 | 14.5 |
| Operatives 2/ | 22.1 | 20.4 | 18.9 |
| Nonfarm laborers | 6.4 | 4.6 | 4.3 |
| **Service Workers** | 14.6 | 12.8 | 12.4 |
| Private household workers | 6.6 | 3.2 | 2.1 |
| Other service workers | 8.0 | 9.6 | 10.3 |
| **Farm Workers** | 8.4 | 3.6 | 2.0 |

1/ Excludes "occupations not reported" from 1960 census and "allocated" and "not specified" from 1970 census. Percents may not add to 100.0 due to rounding. 1960 census includes persons 14 and over.

2/ Includes the 1970 census classifications, "operatives, except transport", and transport equipment operatives.

Many factors will cause changes in employment levels of major occupational groups and specific occupations. One of the greatest will be variation in growth rates among industries. Each has a different occupational structure. For example, the health services industry employs mostly physicians, nurses, hospital attendants, and other health workers. A rapid growth in this industry would logically result in rapid growth of health occupations.

Another factor that affects occupational employment is changes in the occupational structure within an industry. These may be caused by technological innovations in machines or procedures. As a result, individual occupations may expand or contract and new occupations often emerge. For example, the computer resulted in the emergence of programmers, systems analysts, and computer operators but contributed to the decline in relative importance of payroll and inventory clerks and a variety of other clerical occupations. Changes in business operations, such as a shift to self-service in stores and supply-demand conditions in an occupation, can also alter the occupational structure of industries. For example, technicians have been substituted for engineers during periods of engineering shortages.

## Growth Among White-Collar Groups

Professional and technical. Employment growth in this major group will continue to be faster than most, rising from 199,500 in 1970 to about 269,500 in 1980. This is more than one and one-third times the annual rate of employment increases projected for all occupations combined. (See Table 10). Despite this, the projected 1970-80 growth is slower than it was between 1960 and 1970. A major reason for this is the expected slowdown in the growth of jobs for elementary and secondary school teachers and engineers (which together accounted for about one-third of all professional workers in 1970). Opportunities for teachers will slow because growth in the number of pupils will moderate. The rate of increase in engineers' jobs, rapid in the 1960's largely as a result of an expansion of the aerospace industry and increased research and development, will be reduced because these activities are not expected to have a comparable effect through the 1970's.

Growth in demand for goods and services, resulting from population growth and rising business and personal incomes, will continue to be a major reason underlying job growth among these highly trained workers. As the population continues to concentrate in metropolitan areas, requirements are expected to increase for professional and technical workers in environmental protection, urban renewal, and mass transportation. Requirements for professional workers also should increase because of continuing growth of research in the natural and social sciences, although the rate of growth in these activities as a whole is likely to slow from the very rapid pace of the 1960's. Demand for professional workers to develop and use computer resources also is expected to grow rapidly in the 1970-80 period.

Managers and administrators. Employment growth in this major group will be the fastest of all major groups. Employment is projected to reach 202,100 in 1980, up 60,500 from 1970. This represents an average increase of 3.6 percent, compared to 2.3 for all employment, and is a much higher rate of growth than occurred during the 1960-70 period. However, a large part of the future growth reflects a catchup because little change in managerial and administrative employment occurred in the late 60's although total employment increased.

Changes in business size and organization have caused the number of salaried managers to go up while numbers of self-employed managers have declined. Requirements for the salaried are expected to continue to grow rapidly as industry and government increasingly depend on them. Technology will also contribute to their employment growth. For example, an increasing number of technically trained managers will be needed to administer research and development programs and to make decisions on the installation and use of automated machinery and automatic data processing systems.

By contrast, the number of self-employed managers (proprietors) are projected to continue to decline as the trend toward larger firms continues. The expansion of quick-service grocery stores, self-service laundries and drycleaners, and hamburger and frozen custard drive-ins, however, is expected to slow the rate of decline.

### TABLE 10
### AVERAGE ANNUAL RATE OF EMPLOYMENT CHANGE BY MAJOR OCCUPATIONAL GROUP, 1960-70 (ACTUAL) AND 1970-80 (PROJECTED) 1/

| Occupational Group | 1960-70 | 1970-80 |
|---|---|---|
| Total 2/ | 1.7 | 2.3 |
| White-Collar Workers | 3.8 | 3.1 |
| Professional and technical workers | 5.4 | 3.1 |
| Managers and administrators | 2.1 | 3.6 |
| Sales workers | 2.2 | 2.8 |
| Clerical workers | 4.4 | 2.8 |
| Blue-Collar Workers | 1.4 | 1.9 |
| Craftsmen and kindred workers | 3.4 | 2.5 |
| Operatives 3/ | 0.9 | 1.5 |
| Nonfarm laborers | -1.5 | 1.4 |
| Service Workers | 0.5 | 1.9 |
| Private household workers | -5.4 | -1.9 |
| Other service workers | 3.7 | 2.9 |
| Farm Workers | -6.6 | -3.6 |

1/ Compound interest rates between terminal years.

2/ Excludes 1960 census item for "occupations not reported" and 1970 census items for "allocated" and "not specified". 1960 census includes persons 14 years old and over.

3/ Includes 1970 census classifications for "operatives, except transport" and "transport equipment operatives".

Clerical workers. Employment in clerical jobs is expected to grow faster than total employment, rising to about 330,400 in 1980 from 249,700 in 1970. The rate of increase is higher than that expected in total employment. As a result, their share of total employment is expected to increase from 15.7 to 16.6. Nevertheless, the clerical rate of growth is slower than that during 1960-70.

Clerical workers, the largest of the white-collar major occupational groups and second only to operatives for all groups in 1970, will be greatly affected by developments in computers, office equipment, and communication devices -- all of which are expected to retard the growth of employment for some clerical occupations and increase it for others. For example, the use of computers and bookkeeping machines to handle routine, repetitive work is expected to reduce the utilization of clerks in filing, payroll computation, inventory control, and customer billing. On the other hand, the number of clerical workers needed to prepare material for the computer is projected to increase greatly.

Other types of clerical workers, however, are unlikely to be affected significantly by technology. For example, secretaries, typists, and receptionists and others whose tasks involve contact with the public should not be greatly affected.

Sales workers. The anticipated expansion of trade is expected to increase the need for sales workers, while changing techniques in merchandising are expected to hold down some of the increase. Employment is projected to rise about 36,200 from 1970 to 1980. The rate of increase will be 2.8 percent per year compared to 2.3 percent for all employment. As a result, their share of total employment is expected to increase (0.4 percent). As stores remain open longer and expand into suburban areas, an increase in demand is expected for retail salesworkers who account for more than half of all workers in the group. However, changes in merchandising techniques, such as increased use of self-service, checkout counters, and vending machines will retard the increase.

### Growth Among Blue-Collar Groups

Craftsmen and kindred workers. Employment in these highly skilled blue-collar occupations is expected to rise from about 225,600 in 1970 to 288,200 in 1980, a slower rate of growth than over the 1960-70 period. Although demand during the current recession is down, it is expected to pick up in the late 70's due in part to construction of the Metropolitan Atlanta Rapid Transit Authority's rapid rail transportation system. Expansions in manufacturing also will account for part of the demand.

Operatives. More Georgia workers are in this group than in any other. Employment of operatives is projected to rise from 323,300 in 1970 to 376,700 in 1980, a much slower rate of increase than that for total employment. Consequently, the proportion of operatives relative to total employment is expected to slide downward about one-and-a-half percentage points by 1980. This reflects the expected slowing down of the growth rate in manufacturing. About seven of every ten semi-skilled workers in 1970 were employed as operatives in manufacturing. Large numbers were assemblers or inspectors, and many worked as operators of material-moving equipment such as powered forklift trucks. Among the operatives employed outside factories, drivers of trucks, buses, and taxicabs made up the largest group. Through the projected period, sophisticated technological advances are expected to greatly slow employment growth for operatives.

Nonfarm laborers. Employment requirements for laborers are expected to increase slowly between 1970 and 1980 despite the employment rise anticipated in manufacturing and construction, the two industries which employ half of laborers.

Increases in demand for laborers are expected to be offset roughly by rising output per worker resulting from the continuing substitution of machinery for manual labor. For example, power-driven equipment such as forklift trucks, derricks, cranes, hoists, and conveyor belts will take over more of the handling of materials in factories, at freight terminals, and in warehouses. Other power-driven machines will do excavating, ditch digging, and similar work. In addition, integrated systems for processing and handling materials and equipment will be installed in an increasing number of plants.

## Service Workers

A growing population, expanding business activity, increasing leisure time, and rising levels of disposable personal income are the major factors underlying increased needs for service workers. These occupations encompass a wide variety of jobs and skills. They include such diverse jobs as FBI agent, policeman, beauty operator, and janitor.

Employment of service workers is projected to rise from 203,400 in 1970 to 246,600 in 1980, a somewhat slower rate of growth than that projected for total employment. Employment of private household workers, however, which make up a large part of this major group, is projected to decline from 50,400 to 41,800. If private household workers are excluded from the calculations, service workers show a faster average annual rate of growth than total employment (2.9 percent compared to 2.3).

## Farm Workers

These workers are expected to decline nearly one-third (from 57,100 in 1970 to 39,500 in 1980). Their share of total employment is expected to drop from 3.6 percent in 1970 to 2.0. The annual rate of decline, however, is expected to be somewhat less than the 1960-70 rate (3.6 percent compared to 6.6 percent in the earlier decade).

Declining needs for farm workers continue to be related to rising productivity on farms. Improved machinery, fertilizers, seeds, and feed will permit farmers to increase output with fewer employees. For example, improved mechanical harvesters for vegetables and fruits will decrease the need for seasonal or other hired labor. Developments in packing, inspection, and sorting systems for fruits, vegetables, and other farm products also will reduce employment requirements. (An unknown factor is the effect of potential shortages of fertilizers and fuel if the energy crisis is not solved. Also, if the use of chemical insecticides and herbicides are restricted because of federal anti-pollution restrictions, productivity could decline.)

## Conversion To DOT and Vocational Education Program Codes

More occupational groups are shown in Table 11 than were included in the preceding tables. Estimates in this table are rounded to tens. Even greater detail may be found in Appendix A.

BLS is presently preparing a conversion table relating the 1970 Census occupational titles to the Dictionary of Occupational Titles (DOT) and vocational education program codes and titles. In the meantime, use can be made of the conversion table, Table 1, in Tomorrow's Manpower Needs, Supplement 3 (See Appendix D). Table 1 of the document relates 1960 Census occupational titles to DOT titles. However, approximately 100 detailed occupations in the table are marked with as asterisk to indicate that these occupations are generally the same for both the 1960 and 1970 censuses.

# TABLE 11
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATIONAL GROUP 1/

| Occupational Group | 1970 Employment Number 2/ | 1970 Employment Percent 3/ | Projected 1980 Requirements Number 2/ | Projected 1980 Requirements Percent 3/ |
|---|---|---|---|---|
| **Total, All Occupations** | 1,587,800 | 100.0 | 1,987,990 | 100.0 |
| **Professional, Technical and Kindred Workers** | 199,470 | 12.6 | 269,480 | 13.6 |
| Engineers, technical | 18,380 | 1.2 | 23,190 | 1.2 |
| Life and physical scientists | 2,600 | 0.2 | 3,270 | 0.2 |
| Mathematical specialists | 500 | * | 650 | * |
| Engineering and science technicians | 12,840 | 0.8 | 18,830 | 1.0 |
| Medical and health workers, except technicians | 26,300 | 1.7 | 35,920 | 1.8 |
| Health technologists and technicians | 5,290 | 0.3 | 9,190 | 0.5 |
| Technicians, except health, engineering and science | 5,340 | 0.3 | 7,490 | 0.4 |
| Computer specialists | 3,530 | 0.2 | 4,800 | 0.2 |
| Social scientists | 1,490 | 0.1 | 2,560 | 0.1 |
| Teachers | 65,190 | 4.1 | 82,400 | 4.1 |
| Writers, artists and entertainers | 10,970 | 0.7 | 14,910 | 0.8 |
| Other professional, technical and kindred workers | 47,040 | 3.0 | 66,270 | 3.3 |
| **Managers, Officials and Proprietors, Except Farm** | 141,640 | 8.9 | 202,060 | 10.2 |
| Buyers, sales managers and loan managers | 25,980 | 1.6 | 38,510 | 1.9 |
| Administrators and inspectors; public administration | 14,920 | 0.9 | 19,570 | 1.0 |
| Other managers, officials and proprietors | 100,740 | 6.3 | 143,980 | 7.2 |
| **Sales Workers** | 114,160 | 7.2 | 150,420 | 7.6 |
| **Clerical and Kindred Workers** | 249,750 | 15.7 | 330,410 | 16.6 |
| Stenographers, typists and secretaries | 73,580 | 4.6 | 104,290 | 5.3 |
| Office machine operators | 10,080 | 0.6 | 11,080 | 0.6 |
| Other clerical workers | 166,090 | 10.5 | 215,040 | 10.8 |
| **Craftsmen, Foremen and Kindred Workers** | 225,650 | 14.2 | 288,150 | 14.5 |
| Construction craftsmen | 70,530 | 4.4 | 96,940 | 4.9 |
| Foremen, n.e.c. | 37,740 | 2.4 | 47,180 | 2.4 |
| Metalworking craftsmen, except mechanics | 13,520 | 0.9 | 16,430 | 0.8 |
| Mechanics, repairmen and installers | 63,760 | 4.0 | 77,820 | 3.9 |
| Printing trade craftsmen | 6,500 | 0.4 | 8,070 | 0.4 |
| Transportation and public utility craftsmen | 11,020 | 0.7 | 14,550 | 0.7 |
| Other craftsmen and kindred workers | 22,580 | 1.4 | 27,160 | 1.4 |

## TABLE 11
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATIONAL GROUP 1/

| | 1970 Employment | | Projected 1980 Requirements | | Change 1970 – 1980 | |
|---|---|---|---|---|---|---|
| oup | Number 2/ | Percent 3/ | Number 2/ | Percent 3/ | Absolute 2/ | Percent 3/ |
| ations | 1,587,800 | 100.0 | 1,987,990 | 100.0 | 400,190 | 25 |
| chnical and Kindred Workers | 199,470 | 12.6 | 269,480 | 13.6 | 70,010 | 35 |
| chnical | 18,380 | 1.2 | 23,190 | 1.2 | 4,810 | 26 |
| ical scientists | 2,600 | 0.2 | 3,270 | 0.2 | 670 | 26 |
| specialists | 500 | * | 650 | * | 150 | 31 |
| nd science technicians | 12,840 | 0.8 | 18,830 | 1.0 | 5,990 | 47 |
| ealth workers, except technicians | 26,300 | 1.7 | 35,920 | 1.8 | 9,620 | 37 |
| logists and technicians | 5,290 | 0.3 | 9,190 | 0.5 | 3,900 | 74 |
| except health, engineering and science | 5,340 | 0.3 | 7,490 | 0.4 | 2,150 | 40 |
| cialists | 3,530 | 0.2 | 4,800 | 0.2 | 1,270 | 36 |
| sts | 1,490 | 0.1 | 2,560 | 0.1 | 1,070 | 72 |
| | 65,190 | 4.1 | 82,400 | 4.1 | 17,210 | 26 |
| and entertainers | 10,970 | 0.7 | 14,910 | 0.8 | 3,940 | 36 |
| onal, technical and kindred workers | 47,040 | 3.0 | 66,270 | 3.3 | 19,230 | 41 |
| ls and Proprietors, Except Farm | 141,640 | 8.9 | 202,060 | 10.2 | 60,420 | 43 |
| managers and loan managers | 25,980 | 1.6 | 38,510 | 1.9 | 12,530 | 48 |
| and inspectors; public administration | 14,920 | 0.9 | 19,570 | 1.0 | 4,650 | 31 |
| , officials and proprietors | 100,740 | 6.3 | 143,980 | 7.2 | 43,240 | 43 |
| | 114,160 | 7.2 | 150,420 | 7.6 | 36,260 | 32 |
| red Workers | 249,750 | 15.7 | 330,410 | 16.6 | 80,660 | 32 |
| typists and secretaries | 73,580 | 4.6 | 104,290 | 5.3 | 30,710 | 42 |
| operators | 10,080 | 0.6 | 11,080 | 0.6 | 1,000 | 10 |
| workers | 166,090 | 10.5 | 215,040 | 10.8 | 48,950 | 29 |
| en and Kindred Workers | 225,650 | 14.2 | 288,150 | 14.5 | 62,500 | 28 |
| raftsmen | 70,530 | 4.4 | 96,940 | 4.9 | 26,410 | 37 |
| - | 37,740 | 2.4 | 47,180 | 2.4 | 9,440 | 25 |
| raftsmen, except mechanics | 13,520 | 0.9 | 16,430 | 0.8 | 2,910 | 22 |
| airmen and installers | 63,760 | 4.0 | 77,820 | 3.9 | 14,060 | 22 |
| craftsmen | 6,500 | 0.4 | 8,070 | 0.4 | 1,570 | 24 |
| and public utility craftsmen | 11,020 | 0.7 | 14,550 | 0.7 | 3,530 | 32 |
| and kindred workers | 22,580 | 1.4 | 27,160 | 1.4 | 4,580 | 20 |

## TABLE 11 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATIONAL GROUP 1/

| Occupational Group | 1970 Employment | | Projected 1980 Requirements | | |
|---|---|---|---|---|---|
| | Number 2/ | Percent 3/ | Number 2/ | Percent 3/ | Abso |
| **Operatives and Kindred Workers** | 323,290 | 20.4 | 376,720 | 19.0 | 53, |
| Operatives, except transport | 255,600 | 16.1 | 293,480 | 14.8 | 37, |
| Transport equipment operatives | 67,690 | 4.3 | 83,240 | 4.2 | 15, |
| **Service Workers** | 203,380 | 12.8 | 246,600 | 12.4 | 43, |
| Cleaning service workers | 38,620 | 2.4 | 52,260 | 2.6 | 13, |
| Food service workers | 48,230 | 3.0 | 60,000 | 3.0 | 11, |
| Health service workers | 21,830 | 1.4 | 31,130 | 1.6 | 9, |
| Personal service workers | 25,510 | 1.6 | 33,530 | 1.7 | 8, |
| Protective service workers | 18,840 | 1.2 | 27,850 | 1.4 | 9, |
| Private household workers | 50,350 | 3.2 | 41,830 | 2.1 | -8, |
| **Laborers, Except Farm** | 73,350 | 4.6 | 84,650 | 4.3 | 11, |
| **Farmers and Farm Workers** | 57,110 | 3.6 | 39,500 | 2.0 | -17, |
| Farmers and farm managers | 27,060 | 1.7 | 19,260 | 1.0 | -7, |
| Farm laborers and farm foremen | 30,050 | 1.9 | 20,240 | 1.0 | -9, |

1/ This table summarizes information found in greater detail in Appendix Table 2.

2/ Estimates were rounded to ten's.

3/ Percents were computed from unrounded data. Percent change figures are shown as whole numbers.

4/ The 1970 and 1980 "Total, All Industries" employment in Table 6 and the "Total, All Occupations" employment in Table 11 differ be developed from different data sources. The 1970 occupational employment levels are those reported in the 1970 Census for the specifi (after rounding) and are based on place of residence. (Table 11 excludes 158,972 "Not Specified" and "Allocated" cases which were census.) The 1970 industry employment estimates, based on place of work, were developed from Georgia Department of Labor, Employ Agency records, supplemented to include self-employed persons, unpaid family workers, private household workers, and persons with a and adjusted to exclude the secondary job of multiple job holders.

"n.e.c." denotes "not elsewhere classified."

*Less than 0.05.

## TABLE 11 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATIONAL GROUP 1/

| | 1970 Employment | | Projected 1980 Requirements | | Change 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 2/ | Percent 3/ | Number 2/ | Percent 3/ | Absolute 2/ | Percent 3/ |
| d Workers | 323,290 | 20.4 | 376,720 | 19.0 | 53,430 | 17 |
| transport | 255,600 | 16.1 | 293,480 | 14.8 | 37,880 | 15 |
| t operatives | 67,690 | 4.3 | 83,240 | 4.2 | 15,550 | 23 |
| | 203,380 | 12.8 | 246,600 | 12.4 | 43,220 | 21 |
| orkers | 38,620 | 2.4 | 52,260 | 2.6 | 13,640 | 35 |
| rs | 48,230 | 3.0 | 60,000 | 3.0 | 11,770 | 24 |
| ers | 21,830 | 1.4 | 31,130 | 1.6 | 9,300 | 43 |
| orkers | 25,510 | 1.6 | 33,530 | 1.7 | 8,020 | 31 |
| workers | 18,840 | 1.2 | 27,850 | 1.4 | 9,010 | 48 |
| orkers | 50,350 | 3.2 | 41,830 | 2.1 | -8,520 | -17 |
| | 73,350 | 4.6 | 84,650 | 4.3 | 11,300 | 15 |
| ers | 57,110 | 3.6 | 39,500 | 2.0 | -17,610 | -31 |
| nagers | 27,060 | 1.7 | 19,260 | 1.0 | -7,800 | -29 |
| rm foremen | 30,050 | 1.9 | 20,240 | 1.0 | -9,810 | -33 |

izes information found in greater detail in Appendix Table 2.

nded to ten's.

puted from unrounded data. Percent change figures are shown as whole numbers.

"Total, All Industries" employment in Table 6 and the "Total, All Occupations" employment in Table 11 differ because each was
ferent data sources. The 1970 occupational employment levels are those reported in the 1970 Census for the specified occupations
are based on place of residence. (Table 11 excludes 158,972 "Not Specified" and "Allocated" cases which were included in the
industry employment estimates, based on place of work, were developed from Georgia Department of Labor, Employment Security
pplemented to include self-employed persons, unpaid family workers, private household workers, and persons with a job but not at work,
clude the secondary job of multiple job holders.

lsewhere classified."

## Net Occupational Openings

Projections of growth of occupations provide only partial insight into the story of future manpower requirements. Of equal (if not greater) importance is the demand for new workers created by the necessity of replacing workers who retire or die. Over the 1970-80 period more than one-and-a-half times as many openings will result from replacements as from growth. Almost 1,050,000 openings will occur due to occupational growth and replacement needs during 1970-80, an average of about 105,000 annually. Of these, replacements will account for more than 6 of every 10 job openings.

### TABLE 12
### JOB OPENINGS BY MAJOR OCCUPATIONAL GROUP, 1970-1980
(In Thousands)

| Occupational Group | Total | Growth | Replacement 1/ |
|---|---|---|---|
| Total | 1,049.8 | 400.2 | 649.6 |
| White-Collar Workers | 586.7 | 247.4 | 339.3 |
| Professional and technical | 156.8 | 70.0 | 86.8 |
| Managers, officials and proprietors | 108.8 | 60.4 | 48.4 |
| Sales workers | 84.7 | 36.3 | 48.4 |
| Clerical and kindred | 236.4 | 80.7 | 155.7 |
| Blue-Collar Workers | 300.3 | 127.2 | 173.1 |
| Craftsmen and kindred | 109.1 | 62.5 | 46.6 |
| Operatives | 162.7 | 53.4 | 109.3 |
| Nonfarm laborers | 28.5 | 11.3 | 17.2 |
| Service Workers | 160.6 | 43.2 | 117.4 |
| Private household workers | 22.4 | -8.5 | 30.9 |
| Other service workers | 138.2 | 51.7 | 86.5 |
| Farm Workers | 2.2 | -17.6 | 19.8 |

1/ Replacements for the 1970-80 period were computed by multiplying by ten the Lawrence Berkeley Laboratory's estimates of average openings due to labor force separations.

Replacement needs will be the most significant source of job openings in each of the major occupational areas -- white collar, blue collar, service and farm. However, in individual occupations expected to increase rapidly, growth requirements are likely to exceed those for replacement. On the other hand, replacement needs are likely to exceed the average in those occupations that (a) employ many women, who frequently leave the labor force to assume family responsibilities, and (b) have a large proportion of older workers who have relatively few years of working life remaining.

For more details about Georgia's average annual job openings see the next section and Appendix A.

## INTERPOLATED EMPLOYMENT BY INDUSTRY AND OCCUPATION, 1975 AND 1976, AND ANNUAL AVERAGE JOB OPENINGS

One of the purposes of the Interim Manpower Projections Program is to provide manpower and vocational education planners with detailed industry and occupational employment and manpower requirement projections for use in the Fiscal Year 1975 planning cycle. Accordingly, we are presenting summary tables here, with greater detail in Appendix A, of employment by industry and occupation for 1975 with change to 1976 and 1980 and average annual job openings.

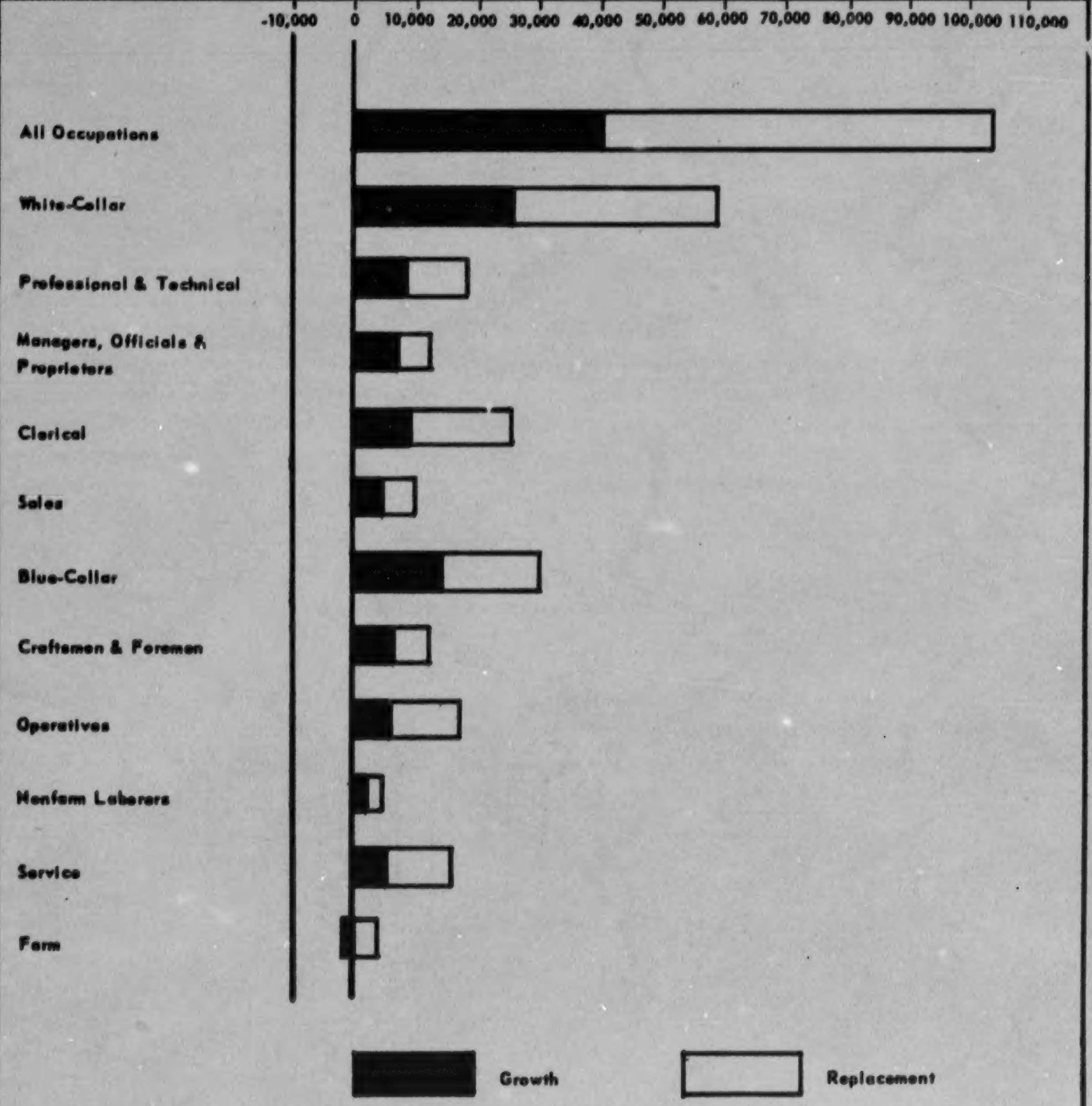
Because the nation is in a recession at the time of this writing, the warning that appears in the Introduction is repeated here. Caution should be used in the interpretation and use of the projections in this section. Estimates of employment for 1975 and 1976 were obtained by linear interpolation of 1970 and 1980 data. The projections method thus does not take into account cyclical, seasonal, and such exogenous factors as sudden and large plant openings or closings. Moreover, the national projections used in the development of state projections do not reflect the potentially serious implications of the "energy crisis" and its effect on future employment.

No analysis is presented of the 1975 and 1976 employment data because they are simple interpolations. As mentioned previously, total employment for all industries is different from the total for all occupations because they are derived from different data sources.

Replacement demand (openings due to separations from the labor force because of death or retirement for various reasons) are average data; therefore, if data for replacements are needed for the full 10-year (1970-80 period), the averages should be multiplied by 10. If needed for 5 years, multiply the averages by 5.

## CHART 6
## AVERAGE ANNUAL JOB OPENINGS[1] IN MAJOR OCCUPATIONAL CATEGORIES AND GROUPS

See Table 15



[1] Job openings data reflect annual average changes in employment over the 1970-80 period as well as separations estimated on the basis of the average annual employment level during the period and estimated 1976 labor force separations rates.

## TABLE 13
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Group | Interpolated 1975 Employment | | Change F |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| **Total, All Industries** | 2,007,550 | 100.0 | 44,000 |
| **Agriculture, Forestry and Fisheries** | 75,920 | 3.8 | -1,850 |
| Agriculture | 72,040 | 3.6 | -1,900 |
| Forestry | 3,280 | 0.2 | 50 |
| Fisheries | 600 | * | - |
| **Mining 4/** | 7,580 | 0.4 | 110 |
| Metal Mining | 430 | * | 20 |
| Nonmetallic Mining and Quarrying | 7,010 | 0.4 | 80 |
| **Construction** | 135,380 | 6.7 | 4,630 |
| General Building Contractors | 37,040 | 1.8 | 1,400 |
| General Contractors, except building | 39,870 | 2.0 | 1,290 |
| Special Trade Contractors | 58,470 | 2.9 | 1,940 |
| **Manufacturing** | 513,860 | 25.6 | 9,140 |
| Durable Goods | 178,160 | 8.9 | 3,740 |
| Nondurable Goods | 335,700 | 16.7 | 5,400 |
| **Transportation and Public Utilities** | 133,110 | 6.6 | 3,270 |
| Transportation | 74,760 | 3.7 | 1,650 |
| Communications | 29,900 | 1.5 | 820 |
| Electric, Gas and Sanitary Services | 28,450 | 1.4 | 800 |
| **Trade** | 423,980 | 21.1 | 11,530 |
| Wholesale | 118,750 | 5.9 | 3,540 |
| Retail | 305,230 | 15.2 | 7,990 |
| **Finance, Insurance and Real Estate** | 97,930 | 4.9 | 2,960 |
| Finance | 45,690 | 2.3 | 2,020 |
| Insurance | 32,670 | 1.6 | 630 |
| Real Estate and combinations of real estate, insurance, loan and law offices | 19,570 | 1.0 | 310 |
| **Services 4/** | 504,590 | 25.1 | 11,820 |
| Hotels and lodging places | 22,590 | 1.1 | 880 |
| Other personal services | 35,900 | 1.8 | 440 |
| Miscellaneous business services | 33,310 | 1.7 | 1,290 |

## TABLE 13
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| es | 2,007,550 | 100.0 | 44,000 | 220,200 |
| try and Fisheries | 75,920 | 3.8 | -1,850 | -9,220 |
| | 72,040 | 3.6 | -1,900 | -9,500 |
| | 3,280 | 0.2 | 50 | 260 |
| | 600 | * | - | 20 |
| | 7,580 | 0.4 | 110 | 570 |
| | 430 | * | 20 | 100 |
| ning and Quarrying | 7,010 | 0.4 | 80 | 410 |
| | 135,380 | 6.7 | 4,630 | 23,190 |
| g Contractors | 37,040 | 1.8 | 1,400 | 7,010 |
| ctors, except building | 39,870 | 2.0 | 1,290 | 6,460 |
| Contractors | 58,470 | 2.9 | 1,940 | 9,720 |
| | 513,860 | 25.6 | 9,140 | 45,730 |
| | 178,160 | 8.9 | 3,740 | 18,690 |
| ds | 335,700 | 16.7 | 5,400 | 27,040 |
| Public Utilities | 133,110 | 6.6 | 3,270 | 16,360 |
| | 74,760 | 3.7 | 1,650 | 8,220 |
| | 29,900 | 1.5 | 820 | 4,140 |
| d Sanitary Services | 28,450 | 1.4 | 800 | 4,000 |
| | 423,980 | 21.1 | 11,530 | 57,700 |
| | 118,750 | 5.9 | 3,540 | 17,710 |
| | 305,230 | 15.2 | 7,990 | 39,990 |
| and Real Estate | 97,930 | 4.9 | 2,960 | 14,800 |
| | 45,690 | 2.3 | 2,020 | 10,090 |
| | 32,670 | 1.6 | 630 | 3,160 |
| combinations of real estate, an and law offices | 19,570 | 1.0 | 310 | 1,550 |
| | 504,590 | 25.1 | 11,820 | 59,110 |
| ng places | 22,590 | 1.1 | 880 | 4,420 |
| ervices | 35,900 | 1.8 | 440 | 2,200 |
| siness services | 33,310 | 1.7 | 1,290 | 6,430 |

## TABLE 13 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Group | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change<br>1976 2/ |
|---|---|---|---|
| Automobile repair services | 13,760 | 0.7 | 190 |
| Other repair services | 7,190 | 0.4 | 90 |
| Motion pictures, theaters | 3,680 | 0.2 | - |
| Miscellaneous entertainment | 8,270 | 0.4 | 260 |
| Medical and other health services | 105,790 | 5.3 | 3,790 |
| Legal services | 7,250 | 0.4 | 160 |
| Educational services | 142,980 | 7.1 | 4,870 |
| Nonprofit organizations | 31,510 | 1.6 | 1,010 |
| Private households | 77,190 | 3.8 | -1,620 |
| Other professional and related services | 15,060 | 0.8 | 460 |
| **Public Administration 5/** | 115,200 | 5.7 | 2,390 |
| Federal | 68,570 | 3.4 | 80 |
| State | 12,220 | 0.6 | 360 |
| Local | 34,410 | 1.7 | 1,950 |

1/ This table summarizes information found in greater detail in Appendix Table 2. Industry employment levels for 1975 and the change fr
and 1980 are the result of simple interpolations of the projected long-run (1970-1980) labor market trend and should not be interpreted
cyclical fluctuations in the economy. (See Table 6 for 1970 and projected 1980 industry employment levels.)

2/ Estimates were rounded to tens.

3/ Percents were computed from unrounded data and may not add to 100.0.

4/ The sum of components will not equal the total shown due to the withholding of information for industries with less than 100 workers i
avoid disclosure of individual establishment data.

5/ Includes public administration only. Government agencies engaged in educational and medical services and in activities commonly ca
private enterprises, such as agriculture, construction, transportation, etc., are classified in their appropriate industry.

*Less than 0.05 percent.

"— " denotes "zero."

## TABLE 13 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| r services | 13,760 | 0.7 | 190 | 950 |
| ices | 7,190 | 0.4 | 90 | 470 |
| theaters | 3,680 | 0.2 | - | -20 |
| tertainment | 8,270 | 0.4 | 260 | 1,300 |
| r health services | 105,790 | 5.3 | 3,790 | 18,960 |
| | 7,250 | 0.4 | 160 | 790 |
| ices | 142,980 | 7.1 | 4,870 | 24,380 |
| ations | 31,510 | 1.6 | 1,010 | 5,060 |
| ds | 77,190 | 3.8 | -1,620 | -8,120 |
| l and related services | 15,060 | 0.8 | 460 | 2,290 |
| n 5/ | 115,200 | 5.7 | 2,390 | 11,960 |
| | 68,570 | 3.4 | 80 | 420 |
| | 12,220 | 0.6 | 360 | 1,820 |
| | 34,410 | 1.7 | 1,950 | 9,720 |

arizes information found in greater detail in Appendix Table 2. Industry employment levels for 1975 and the change from 1975 to 1976
result of simple interpolations of the projected long-run (1970-1980) labor market trend and should not be interpreted as representing
tions in the economy. (See Table 6 for 1970 and projected 1980 industry employment levels.)

rounded to tens.

omputed from unrounded data and may not add to 100.0.

ponents will not equal the total shown due to the withholding of information for industries with less than 100 workers in 1970 or to
of individual establishment data.

administration only. Government agencies engaged in educational and medical services and in activities commonly carried on by
es, such as agriculture, construction, transportation, etc., are classified in their appropriate industry.

ent.

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## TABLE 14
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Group | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change Fro<br>1976 2/ |
|---|---|---|---|
| **Total, All Occupations** | 1,787,920 | 100.0 | 39,990 |
| **Professional, Technical and Kindred Workers** | 234,480 | 13.1 | 7,000 |
| Engineers, technical | 20,790 | 1.2 | 480 |
| Life and physical scientists | 2,940 | 0.2 | 70 |
| Mathematical specialists | 580 | * | 10 |
| Engineering and science technicians | 15,840 | 0.9 | 600 |
| Medical and health workers, except technicians | 31,090 | 1.7 | 960 |
| Health technologists and technicians | 7,250 | 0.4 | 390 |
| Technicians, except health, engineering and science | 6,420 | 0.4 | 220 |
| Computer specialists | 4,160 | 0.2 | 130 |
| Social scientists | 2,020 | 0.1 | 110 |
| Teachers | 73,800 | 4.1 | 1,720 |
| Writers, artists and entertainers | 12,940 | 0.7 | 390 |
| Other professional, technical and kindred workers | 56,650 | 3.2 | 1,920 |
| **Managers, Officials and Proprietors, except Farm** | 171,850 | 9.6 | 6,040 |
| Buyers, sales managers, and loan managers | 32,250 | 1.8 | 1,250 |
| Administrators and inspectors; public administration | 17,240 | 1.0 | 470 |
| Other managers, officials and proprietors | 122,360 | 6.8 | 4,320 |
| **Sales Workers** | 132,780 | 7.4 | 3,630 |
| **Clerical and Kindred Workers** | 290,080 | 16.2 | 8,070 |
| Stenographers, typists and secretaries | 88,940 | 5.0 | 3,070 |
| Office machine operators | 10,570 | 0.6 | 110 |
| Other clerical workers | 190,570 | 10.7 | 4,890 |
| **Craftsmen, Foremen and Kindred Workers** | 256,910 | 14.4 | 6,240 |
| Construction craftsmen | 83,740 | 4.7 | 2,640 |
| Foremen, n.e.c. | 42,460 | 2.4 | 940 |
| Metalworking craftsmen, except mechanics | 14,980 | 0.8 | 290 |
| Mechanics, repairmen and installers | 70,790 | 4.0 | 1,400 |
| Printing trade craftsmen | 7,290 | 0.4 | 150 |
| Transportation and public utility craftsmen | 12,790 | 0.7 | 350 |
| Other craftsmen and kindred workers | 24,860 | 1.4 | 470 |

## TABLE 14
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 1,787,920 | 100.0 | 39,990 | 200,070 |
| **and Kindred Workers** | **234,480** | **13.1** | **7,000** | **35,000** |
| | 20,790 | 1.2 | 480 | 2,400 |
| ientists | 2,940 | 0.2 | 70 | 330 |
| lists | 580 | * | 10 | 70 |
| nce technicians | 15,840 | 0.9 | 600 | 2,990 |
| orkers, except technicians | 31,090 | 1.7 | 960 | 4,830 |
| and technicians | 7,250 | 0.4 | 390 | 1,940 |
| health, engineering and science | 6,420 | 0.4 | 220 | 1,070 |
| | 4,160 | 0.2 | 130 | 640 |
| | 2,020 | 0.1 | 110 | 540 |
| | 73,800 | 4.1 | 1,720 | 8,600 |
| ntertainers | 12,940 | 0.7 | 390 | 1,970 |
| echnical and kindred workers | 56,650 | 3.2 | 1,920 | 9,620 |
| **Proprietors, except Farm** | **171,850** | **9.6** | **6,040** | **30,210** |
| ers, and loan managers | 32,250 | 1.8 | 1,250 | 6,260 |
| spectors; public administration | 17,240 | 1.0 | 470 | 2,330 |
| ials and proprietors | 122,360 | 6.8 | 4,320 | 21,620 |
| | **132,280** | **7.4** | **3,630** | **18,140** |
| **kers** | **290,080** | **16.2** | **8,070** | **40,330** |
| s and secretaries | 88,940 | 5.0 | 3,070 | 15,350 |
| tors | 10,570 | 0.6 | 110 | 510 |
| | 190,570 | 10.7 | 4,890 | 24,470 |
| **Kindred Workers** | **256,910** | **14.4** | **6,240** | **31,240** |
| n | 83,740 | 4.7 | 2,640 | 13,200 |
| | 42,460 | 2.4 | 940 | 4,720 |
| en, except mechanics | 14,980 | 0.8 | 290 | 1,450 |
| and installers | 70,790 | 4.0 | 1,400 | 7,030 |
| en | 7,290 | 0.4 | 150 | 780 |
| blic utility craftsmen | 12,790 | 0.7 | 350 | 1,760 |
| indred workers | 24,860 | 1.4 | 470 | 2,300 |

## TABLE 14 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Group | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change<br>1976 2/ |
|---|---|---|---|
| **Operators and Kindred Workers** | 350,040 | 19.6 | 5,310 |
| Operatives, except transport | 274,570 | 15.4 | 3,760 |
| Transport equipment operatives | 75,470 | 4.2 | 1,550 |
| **Service Workers** | 224,980 | 12.6 | 4,330 |
| Cleaning service workers | 45,440 | 2.5 | 1,360 |
| Food service workers | 54,120 | 3.0 | 1,180 |
| Health service workers | 26,460 | 1.5 | 940 |
| Personal service workers | 29,520 | 1.6 | 800 |
| Protective service workers | 23,350 | 1.3 | 900 |
| Private household workers | 46,090 | 2.6 | -850 |
| **Laborers, except Farm** | 78,990 | 4.4 | 1,140 |
| **Farmers and Farm Workers** | 48,310 | 2.7 | -1,770 |
| Farmers and farm managers | 23,160 | 1.3 | -780 |
| Farm laborers and farm foremen | 25,150 | 1.4 | -990 |

---

1/ This table summarizes information found in greater detail in Appendix Table 4. Occupational employment levels for 1975 and the ch
1976 and 1980 are the result of simple interpolations of the projected long-run (1970-1980) labor market trend and should not be inter
representing cyclical fluctuations in the economy. (See Table 11 for 1970 and 1980 occupational employment levels.)

2/ Estimates were rounded to tens.

3/ Percents were computed from unrounded data and may not add to 100.0.

*Less than 0.05 percent.

"n.e.c." denotes "not elsewhere classified."

## TABLE 14 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| red Workers | 350,040 | 19.6 | 5,310 | 26,680 |
| ept transport | 274,570 | 15.4 | 3,760 | 18,910 |
| ment operatives | 75,470 | 4.2 | 1,550 | 7,770 |
| | 224,980 | 12.6 | 4,330 | 21,620 |
| workers | 45,440 | 2.5 | 1,360 | 6,820 |
| rkers | 54,120 | 3.0 | 1,180 | 5,880 |
| orkers | 26,460 | 1.5 | 940 | 4,670 |
| workers | 29,520 | 1.6 | 800 | 4,010 |
| ce workers | 23,350 | 1.3 | 900 | 4,500 |
| ld workers | 46,090 | 2.6 | -850 | -4,260 |
| rm | 78,990 | 4.4 | 1,140 | 5,660 |
| orkers | 48,310 | 2.7 | -1,770 | -8,810 |
| managers | 23,160 | 1.3 | -780 | -3,900 |
| d farm foremen | 25,150 | 1.4 | -990 | -4,910 |

marizes information found in greater detail in Appendix Table 4. Occupational employment levels for 1975 and the change from 1975 to are the result of simple interpolations of the projected long-run (1970-1980) labor market trend and should not be interpreted as clical fluctuations in the economy. (See Table 11 for 1970 and 1980 occupational employment levels.)

rounded to tens.

computed from unrounded data and may not add to 100.0.

cent.

ot elsewhere classified."

## TABLE 15
## GEORGIA 1976 ANNUAL AVERAGE EMPLOYMENT AND JOB OPENINGS BY OCCUPATIONAL GROUP 1/

| | Estimated 1976 Employment 2/ | | Total Job Openings, 1976 3/ | | | Op |
|---|---|---|---|---|---|---|
| Occupational Group | Number 4/ | Percent of Total 5/ | Number 4/ | Percent of Total 5/ | Percent of Employment 5/ | Growth |
| **Total, All Occupations** | 1,827,910 | 100.0 | 104,950 | 100.0 | 5.7 | 39,99 |
| **Professional, Technical and Kindred Workers** | 241,480 | 13.2 | 15,680 | 14.9 | 6.5 | 7,00 |
| Engineers, technical | 21,270 | 1.2 | 780 | 0.7 | 3.7 | 48 |
| Life and physical scientists | 3,010 | 0.2 | 120 | 0.1 | 4.1 | 7 |
| Mathematical specialists | 590 | * | 30 | * | 5.6 | 1 |
| Engineering and science technicians | 16,440 | 0.9 | 840 | 0.8 | 5.1 | 60 |
| Medical and health workers, except technicians | 32,050 | 1.8 | 2,450 | 2.3 | 7.7 | 96 |
| Health technologists and technicians | 7,640 | 0.4 | 760 | 0.7 | 9.9 | 39 |
| Technicians, except health, engineering and science | 6,640 | 0.4 | 290 | 0.3 | 4.4 | 22 |
| Computer specialists | 4,290 | 0.2 | 220 | 0.2 | 5.1 | 13 |
| Social scientists | 2,130 | 0.1 | 150 | 0.1 | 6.9 | 11 |
| Teachers | 75,520 | 4.1 | 5,430 | 5.2 | 7.2 | 1,72 |
| Writers, artists and entertainers | 13,330 | 0.7 | 790 | 0.8 | 5.9 | 39 |
| Other professional, technical and kindred workers | 58,570 | 3.2 | 3,820 | 3.6 | 6.5 | 1,92 |
| **Managers, Officials and Proprietors, Except Farm** | 177,890 | 9.7 | 10,880 | 10.4 | 6.1 | 6,04 |
| Buyers, sales managers and loan managers | 33,500 | 1.8 | 1,970 | 1.9 | 5.9 | 1,25 |
| Administrators and inspectors; public administration | 17,710 | 1.0 | 1,040 | 1.0 | 5.9 | 47 |
| Other managers, officials and proprietors | 126,680 | 6.9 | 7,870 | 7.5 | 6.2 | 4,32 |
| **Sales Workers** | 135,910 | 7.4 | 8,470 | 8.1 | 6.2 | 3,63 |
| **Clerical and Kindred Workers** | 298,150 | 16.3 | 23,640 | 22.5 | 7.9 | 8,07 |
| Stenographers, typists and secretaries | 92,010 | 5.0 | 9,140 | 8.7 | 9.9 | 3,07 |
| Office machine operators | 10,680 | 0.6 | 660 | 0.6 | 6.2 | 11 |
| Other clerical workers | 195,460 | 10.7 | 13,840 | 13.2 | 7.1 | 4,89 |
| **Craftsmen, Foremen and Kindred Workers** | 263,150 | 14.4 | 10,900 | 10.4 | 4.1 | 6,24 |
| Construction craftsmen | 86,380 | 4.7 | 4,240 | 4.0 | 4.9 | 2,64 |
| Foremen, n.e.c. | 43,400 | 2.4 | 1,790 | 1.7 | 4.1 | 94 |
| Metalworking craftsmen, except mechanics | 15,270 | 0.8 | 540 | 0.5 | 3.5 | 29 |
| Mechanics, repairmen and installers | 72,190 | 4.0 | 2,450 | 2.3 | 3.4 | 1,40 |
| Printing trade craftsmen | 7,440 | 0.4 | 300 | 0.3 | 4.1 | 15 |
| Transportation and public utility craftsmen | 13,140 | 0.7 | 490 | 0.5 | 3.8 | 35 |
| Other craftsmen and kindred workers | 25,330 | 1.4 | 1,090 | 1.0 | 4.2 | 47 |

## TABLE 15
## GEORGIA 1976 ANNUAL AVERAGE EMPLOYMENT AND JOB OPENINGS BY OCCUPATIONAL GROUP 1/

| | Estimated 1976 Employment 2/ | | Total Job Openings, 1976 3/ | | | Openings Due To | |
|---|---|---|---|---|---|---|---|
| | Number 4/ | Percent of Total 5/ | Number 4/ | Percent of Total 5/ | Percent of Employment 5/ | Growth 4/ | Labor Force Separations 4/ |
| | 1,827,910 | 100.0 | 104,950 | 100.0 | 5.7 | 39,990 | 64,960 |
| **l and Kindred Workers** | 241,480 | 13.2 | 15,680 | 14.9 | 6.5 | 7,000 | 8,680 |
| | 21,270 | 1.2 | 780 | 0.7 | 3.7 | 480 | 300 |
| ientists | 3,010 | 0.2 | 120 | 0.1 | 4.1 | 70 | 50 |
| lists | 590 | * | 30 | * | 5.6 | 10 | 20 |
| ence technicians | 16,440 | 0.9 | 840 | 0.8 | 5.1 | 600 | 240 |
| orkers, except technicians | 32,050 | 1.8 | 2,450 | 2.3 | 7.7 | 960 | 1,490 |
| and technicians | 7,640 | 0.4 | 760 | 0.7 | 9.9 | 390 | 370 |
| health, engineering and science | 6,640 | 0.4 | 290 | 0.3 | 4.4 | 220 | 70 |
| | 4,290 | 0.2 | 220 | 0.2 | 5.1 | 130 | 90 |
| | 2,130 | 0.1 | 150 | 0.1 | 6.9 | 110 | 40 |
| | 75,520 | 4.1 | 5,430 | 5.2 | 7.2 | 1,720 | 3,710 |
| ntertainers | 13,330 | 0.7 | 790 | 0.8 | 5.9 | 390 | 400 |
| echnical and kindred workers | 58,570 | 3.2 | 3,820 | 3.6 | 6.5 | 1,920 | 1,900 |
| **Proprietors, Except Farm** | 177,890 | 9.7 | 10,880 | 10.4 | 6.1 | 6,040 | 4,840 |
| ers and loan managers | 33,500 | 1.8 | 1,970 | 1.9 | 5.9 | 1,250 | 720 |
| nspectors; public administration | 17,710 | 1.0 | 1,040 | 1.0 | 5.9 | 470 | 570 |
| cials and proprietors | 126,680 | 6.9 | 7,870 | 7.5 | 6.2 | 4,320 | 3,550 |
| | 135,910 | 7.4 | 8,470 | 8.1 | 6.2 | 3,630 | 4,840 |
| **rkers** | 298,150 | 16.3 | 23,640 | 22.5 | 7.9 | 8,070 | 15,570 |
| s and secretaries | 92,010 | 5.0 | 9,140 | 8.7 | 9.9 | 3,070 | 6,070 |
| tors | 10,680 | 0.6 | 660 | 0.6 | 6.2 | 110 | 550 |
| rs | 195,460 | 10.7 | 13,840 | 13.2 | 7.1 | 4,890 | 8,950 |
| **Kindred Workers** | 263,150 | 14.4 | 10,900 | 10.4 | 4.1 | 6,240 | 4,660 |
| en | 86,380 | 4.7 | 4,240 | 4.0 | 4.9 | 2,640 | 1,600 |
| | 43,400 | 2.4 | 1,790 | 1.7 | 4.1 | 940 | 850 |
| en, except mechanics | 15,270 | 0.8 | 540 | 0.5 | 3.5 | 290 | 250 |
| n and installers | 72,190 | 4.0 | 2,450 | 2.3 | 3.4 | 1,400 | 1,050 |
| men | 7,440 | 0.4 | 300 | 0.3 | 4.1 | 150 | 150 |
| ublic utility craftsmen | 13,140 | 0.7 | 490 | 0.5 | 3.8 | 350 | 140 |
| kindred workers | 25,330 | 1.4 | 1,090 | 1.0 | 4.2 | 470 | 620 |

# TABLE 15 - continued
# GEORGIA 1976 ANNUAL AVERAGE EMPLOYMENT AND JOB OPENINGS BY OCCUPATIONAL GROUP 1/

| | Estimated 1976 Employment 2/ | | Total Job Openings, 1976 3/ | | | O |
|---|---|---|---|---|---|---|
| Occupational Group | Number 4/ | Percent of Total 5/ | Number 4/ | Percent of Total 5/ | Percent of Employment 5/ | Grow |
| **Operatives and Kindred Workers** | 355,350 | 19.4 | 16,240 | 15.5 | 4.6 | 5,31 |
| Operatives, except transport | 278,330 | 15.2 | 13,450 | 12.8 | 4.8 | 3,76 |
| Transport equipment operatives | 77,020 | 4.2 | 2,790 | 2.7 | 3.6 | 1,55 |
| **Service Workers** | 229,310 | 12.5 | 16,070 | 15.3 | 7.0 | 4,33 |
| Cleaning service workers | 46,800 | 2.6 | 3,350 | 3.2 | 7.2 | 1,36 |
| Food service workers | 55,300 | 3.0 | 3,850 | 3.7 | 7.0 | 1,18 |
| Health service workers | 27,400 | 1.5 | 2,440 | 2.3 | 8.9 | 94 |
| Personal service workers | 30,320 | 1.7 | 2,580 | 2.5 | 8.5 | 80 |
| Protective service workers | 24,250 | 1.3 | 1,610 | 1.5 | 6.7 | 90 |
| Private household workers | 45,240 | 2.5 | 2,240 | 2.1 | 5.0 | -85 |
| **Laborers, Except Farm** | 80,130 | 4.4 | 2,860 | 2.7 | 3.6 | 1,14 |
| **Farmers and Farm Workers** | 46,540 | 2.6 | 210 | 0.2 | 0.5 | -1,77 |
| Farmers and farm managers | 22,380 | 1.2 | 280 | 0.3 | 1.2 | -78 |
| Farm laborers and farm foremen | 24,160 | 1.3 | -70 | -0.1 | -0.3 | -99 |

1/ This table summarizes information found in greater detail in Appendix Table 5.

2/ Occupational employment levels are simple interpolations of the projected long-run (1970-1980) labor market trend and should not be representing cyclical fluctuations in the economy.

3/ Job openings data reflect annual average changes in employment over the 1970-1980 period as well as separations estimated on the b average annual employment level during the period and estimated 1976 labor force separation rates.

4/ Estimates were rounded to ten's.

5/ Percents were computed from unrounded data and may not add to 100.0.

"n.e.c." denotes "not elsewhere classified".

* Denotes less than 0.05.

# TABLE 15 - continued
# GEORGIA 1976 ANNUAL AVERAGE EMPLOYMENT AND JOB OPENINGS BY OCCUPATIONAL GROUP 1/

|  | Estimated 1976 Employment 2/ |  | Total Job Openings, 1976 3/ |  |  | Openings Due To |  |
|---|---|---|---|---|---|---|---|
|  | Number 4/ | Percent of Total 5/ | Number 4/ | Percent of Total 5/ | Percent of Employment 5/ | Growth 4/ | Labor Force Separations 4/ |
| ed Workers | 355,350 | 19.4 | 16,240 | 15.5 | 4.6 | 5,310 | 10,930 |
| transport | 278,330 | 15.2 | 13,450 | 12.8 | 4.8 | 3,760 | 9,690 |
| nt operatives | 77,020 | 4.2 | 2,790 | 2.7 | 3.6 | 1,550 | 1,240 |
|  | 229,310 | 12.5 | 16,070 | 15.3 | 7.0 | 4,330 | 11,740 |
| workers | 46,800 | 2.6 | 3,350 | 3.2 | 7.2 | 1,360 | 1,990 |
| ers | 55,300 | 3.0 | 3,850 | 3.7 | 7.0 | 1,180 | 2,670 |
| kers | 27,400 | 1.5 | 2,440 | 2.3 | 8.9 | 940 | 1,500 |
| vorkers | 30,320 | 1.7 | 2,580 | 2.5 | 8.5 | 800 | 1,780 |
| workers | 24,250 | 1.3 | 1,610 | 1.5 | 6.7 | 900 | 710 |
| workers | 45,240 | 2.5 | 2,240 | 2.1 | 5.0 | -850 | 3,090 |
| m | 80,130 | 4.4 | 2,860 | 2.7 | 3.6 | 1,140 | 1,720 |
| rkers | 46,540 | 2.6 | 210 | 0.2 | 0.5 | -1,770 | 1,980 |
| managers | 22,380 | 1.2 | 280 | 0.3 | 1.2 | -780 | 1,060 |
| farm foremen | 24,160 | 1.3 | -70 | -0.1 | -0.3 | -990 | 920 |

rizes information found in greater detail in Appendix Table 5.

loyment levels are simple interpolations of the projected long-run (1970-1980) labor market trend and should not be interpreted as ical fluctuations in the economy.

reflect annual average changes in employment over the 1970-1980 period as well as separations estimated on the basis of the nployment level during the period and estimated 1976 labor force separation rates.

ounded to ten's.

nputed from unrounded data and may not add to 100.0.

t elsewhere classified".

.05.

# METHODOLOGY

The estimates and projections in this report are the product of a cooperative Federal-State effort funded by the U.S. Department of Labor, Manpower Administration (MA). The Bureau of Labor Statistics (BLS) was responsible for planning, design, and technical coordination of the program. The MA, in consultation with BLS, was responsible for providing an outside contractor (Lawrence Berkeley Laboratory) to process input submitted by the States.

Working under guidelines furnished by BLS, the Georgia Department of Labor, Employment Security Agency, furnished data inputs on 1970 industry employment by class of worker in the detail required for the National Industry Occupational Matrix. The State Agency also furnished a historical series of nonagricultural wage and salary employment estimates which was regressed against national projections to produce State wage and salary projections. After review by the State Agency, the wage and salary projections were incorporated into projections of total employment by industry. The 1980 industry projections were then applied, through the use of the computer, to Georgia's 1970 Census occupational employment levels to produce 1980 employment projections.

In addition to the long-term projections, the Georgia Agency was furnished computer-processed interpolations for 1975 and 1976 of the 1970-80 trend in industry and occupational employment and a tabulation of average annual job openings by occupation.

The Georgia Department of Labor, Employment Security Agency, has final responsibility for the estimates and projections and for this report. Users are cautioned to read the limitations set forth in the Introduction and the other sections of this report, especially those that apply to the 1975 and 1976 data.

# APPENDIX A

## DETAILED GEORGIA INTERIM MANPOWER PROJECTIONS TABLES

Table 1. Georgia Total Employment by Industry, 1970 and Projected to 1980

Table 2. Georgia Industry Employment Interpolated to 1975 and Change to 1976 and 1980

Table 3. Georgia 1970 Employment and Projected 1980 Requirements by Occupation

Table 4. Georgia Occupational Employment Interpolated to 1975 and Change to 1976 and 1980

Table 5. Georgia 1976 Employment and Job Openings by Occupation

# TABLE 1
# GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| Industry Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Employment Number 1/ | Projected 1980 Employment Percent 2/ | Absol |
|---|---|---|---|---|---|
| **Total, All Industries 3/** | 1,787,350 | 100.0 | 2,227,750 | 100.0 | 440. |
| **Agriculture, Forestry, Fisheries** | 85,140 | 4.8 | 66,700 | 3.0 | -18, |
| Agriculture | 81,550 | 4.6 | 62,540 | 2.8 | -19, |
| Agricultural production | 73,310 | 4.1 | 52,130 | 2.3 | -21, |
| Agricultural services, except horticultural | 5,050 | 0.3 | 6,380 | 0.3 | 1, |
| Horticultural services | 3,190 | 0.2 | 4,030 | 0.2 | |
| Forestry | 3,010 | 0.2 | 3,540 | 0.2 | |
| Fisheries | 580 | * | 620 | * | |
| **Mining 4/** | 7,020 | 0.4 | 8,150 | 0.4 | 1, |
| Metal Mining | 330 | * | 540 | * | |
| Nonmetallic Mining, Quarrying | 6,600 | 0.4 | 7,430 | 0.3 | |
| **Construction** | 112,180 | 6.3 | 158,570 | 7.1 | 46, |
| General Building Contractors | 30,010 | 1.7 | 44,050 | 2.0 | 14, |
| General Contractors, except building | 33,410 | 1.9 | 46,330 | 2.1 | 12, |
| Special Trade Contractors | 48,760 | 2.7 | 68,190 | 3.1 | 19, |
| **Manufacturing** | 468,130 | 26.2 | 559,590 | 25.1 | 91, |
| Durable Goods | 159,480 | 8.9 | 196,850 | 8.8 | 37, |
| Lumber and wood products, except furniture | 27,360 | 1.5 | 30,220 | 1.4 | 2, |
| Logging | 6,960 | 0.4 | 7,160 | 0.3 | |
| Sawmills, planing mills, millwork | 16,070 | 0.9 | 18,160 | 0.8 | 2, |
| Miscellaneous wood products | 4,330 | 0.2 | 4,900 | 0.2 | |
| Furniture and fixtures | 9,530 | 0.5 | 12,690 | 0.6 | 3, |
| Stone, clay and glass products | 13,830 | 0.8 | 18,570 | 0.8 | 4, |
| Cement, concrete, plaster | 5,920 | 0.3 | 8,450 | 0.4 | 2, |
| Structural clay products | 3,040 | 0.2 | 3,720 | 0.2 | |
| Pottery and related products | 220 | * | 280 | * | |
| Miscellaneous nonmetallic mineral and stone products | 2,930 | 0.2 | 3,560 | 0.2 | |
| Primary metal industries | 8,130 | 0.5 | 12,190 | 0.6 | 4, |
| Ferrous metal industries | 3,730 | 0.2 | 4,760 | 0.2 | 1, |
| Nonferrous metal industries | 4,400 | 0.3 | 7,430 | 0.3 | 3, |
| Fabricated metal products | 16,900 | 1.0 | 29,490 | 1.3 | 12, |
| Cutlery, other hardware | 290 | * | 500 | * | |
| Fabricated structural metal products | 9,250 | 0.5 | 16,130 | 0.7 | 6, |
| Metal stamping | 2,800 | 0.2 | 4,890 | 0.2 | 2, |
| Miscellaneous fabricated metal products | 4,480 | 0.3 | 7,830 | 0.4 | 3, |

## TABLE 1
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

|  | 1970 Employment |  | Projected 1980 Employment |  | Change, 1970 – 1980 |  |
|---|---|---|---|---|---|---|
|  | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
|  | **1,787,350** | **100.0** | **2,227,750** | **100.0** | **440.400** | **25** |
| sheries | **85,140** | **4.8** | **66,700** | **3.0** | **-18,440** | **-22** |
|  | 81,550 | 4.6 | 62,540 | 2.8 | -19,010 | -23 |
| tion | 73,310 | 4.1 | 52,130 | 2.3 | -21,180 | -29 |
| es, except horticultural | 5,050 | 0.3 | 6,380 | 0.3 | 1,330 | 26 |
| es | 3,190 | 0.2 | 4,030 | 0.2 | 840 | 26 |
|  | 3,010 | 0.2 | 3,540 | 0.2 | 530 | 18 |
|  | 580 | * | 620 | * | 40 | 7 |
|  | **7,020** | **0.4** | **8,150** | **0.4** | **1,130** | **16** |
|  | 330 | * | 540 | * | 210 | 65 |
| arrying | 6,600 | 0.4 | 7,430 | 0.3 | 830 | 13 |
|  | **112,180** | **6.3** | **158,570** | **7.1** | **46,390** | **41** |
| actors | 30,010 | 1.7 | 44,050 | 2.0 | 14,040 | 47 |
| xcept building | 33,410 | 1.9 | 46,330 | 2.1 | 12,920 | 39 |
| ors | 48,760 | 2.7 | 68,190 | 3.1 | 19,430 | 40 |
|  | **468,130** | **26.2** | **559,590** | **25.1** | **91,460** | **20** |
|  | 159,480 | 8.9 | 196,850 | 8.8 | 37,370 | 23 |
| oducts, except furniture | 27,360 | 1.5 | 30,220 | 1.4 | 2,860 | 10 |
|  | 6,960 | 0.4 | 7,160 | 0.3 | 200 | 3 |
| mills, millwork | 16,070 | 0.9 | 18,160 | 0.8 | 2,090 | 13 |
| ood products | 4,330 | 0.2 | 4,900 | 0.2 | 570 | 13 |
| es | 9,530 | 0.5 | 12,690 | 0.6 | 3,160 | 33 |
| s products | 13,830 | 0.8 | 18,570 | 0.8 | 4,740 | 34 |
| , plaster | 5,920 | 0.3 | 8,450 | 0.4 | 2,530 | 43 |
| oducts | 3,040 | 0.2 | 3,720 | 0.2 | 680 | 22 |
| ed products | 220 | * | 280 | * | 60 | 25 |
| nmetallic mineral and stone products | 2,930 | 0.2 | 3,560 | 0.2 | 630 | 22 |
| tries | 8,130 | 0.5 | 12,190 | 0.6 | 4,060 | 50 |
| lustries | 3,730 | 0.2 | 4,760 | 0.2 | 1,030 | 28 |
| industries | 4,400 | 0.3 | 7,430 | 0.3 | 3,030 | 69 |
| oducts | 16,900 | 1.0 | 29,490 | 1.3 | 12,590 | 75 |
| dware | 290 | * | 500 | * | 210 | 73 |
| ural metal products | 9,250 | 0.5 | 16,130 | 0.7 | 6,880 | 74 |
|  | 2,800 | 0.2 | 4,890 | 0.2 | 2,090 | 75 |
| bricated metal products | 4,480 | 0.3 | 7,830 | 0.4 | 3,350 | 75 |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970
## AND PROJECTED TO 1980

| Industry Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Employment Number 1/ | Projected 1980 Employment Percent 2/ | Absol |
|---|---|---|---|---|---|
| Machinery, except electrical | 14,240 | 0.8 | 20,380 | 0.9 | 6, |
| Farm machinery and equipment | 2,290 | 0.1 | 3,290 | 0.2 | 1, |
| Construction and related machinery | 1,450 | 0.1 | 2,080 | 0.1 | |
| Metalworking machinery | 1,320 | 0.1 | 1,900 | 0.1 | |
| Office, accounting machines | 450 | * | 640 | * | |
| Machinery, n.e.c. | 8,380 | 0.5 | 11,980 | 0.5 | 3, |
| Electrical machinery, equipment and supplies | 11,860 | 0.7 | 17,910 | 0.8 | 6, |
| Household appliances | 430 | * | 650 | * | |
| Radio, TV, communication equipment | 980 | 0.1 | 1,480 | 0.1 | |
| Electrical machinery, n.e.c. | 10,450 | 0.6 | 15,780 | 0.7 | 5, |
| Transportation equipment | 47,720 | 2.7 | 42,880 | 1.9 | -4, |
| Motor vehicles and equipment | 14,250 | 0.8 | 16,680 | 0.8 | 2, |
| Aircraft and parts | 25,640 | 1.4 | 14,820 | 0.7 | -10, |
| Ship and boat building and repairing | 1,230 | 0.1 | 1,070 | 0.1 | |
| Mobile dwellings | 6,010 | 0.3 | 9,380 | 0.4 | 3 |
| Cycles, miscellaneous transportation equipment | 420 | * | 660 | * | |
| Instruments and related products | 2,840 | 0.2 | 4,700 | 0.2 | 1 |
| Optical, health services supplies | 1,230 | 0.1 | 2,020 | 0.1 | |
| Miscellaneous manufacturing industries | 5,940 | 0.3 | 7,600 | 0.3 | 1 |
| | | | | | |
| Nondurable Goods 4/ | 308,650 | 17.3 | 362,740 | 16.3 | 54 |
| Food and kindred products | 52,640 | 2.9 | 58,630 | 2.6 | 5 |
| Meat products | 16,260 | 0.9 | 19,430 | 0.9 | 3 |
| Dairy products | 5,020 | 0.3 | 5,370 | 0.2 | |
| Canning and preserving | 5,250 | 0.3 | 5,110 | 0.2 | |
| Grain mill products | 2,840 | 0.2 | 2,620 | 0.1 | |
| Bakery products | 8,510 | 0.5 | 9,700 | 0.4 | |
| Beverage industries | 7,470 | 0.4 | 9,150 | 0.4 | |
| Miscellaneous food preparation | 4,830 | 0.3 | 4,810 | 0.2 | |
| Textile mill products | 115,020 | 6.4 | 129,010 | 5.8 | 1 |
| Knitting mills | 9,690 | 0.5 | 10,870 | 0.5 | |
| Dyeing, finishing textiles | 4,530 | 0.3 | 5,080 | 0.2 | |
| Floor coverings | 26,470 | 1.5 | 29,680 | 1.3 | |
| Yarn, fabric mills | 66,170 | 3.7 | 74,230 | 3.3 | |
| Miscellaneous textile mill products | 8,160 | 0.5 | 9,150 | 0.4 | |
| Apparel and other finished textile products | 70,470 | 3.9 | 85,470 | 3.8 | 1 |
| Apparel and accessories | 63,670 | 3.6 | 77,240 | 3.5 | 1 |
| Miscellaneous fabricated products | 6,800 | 0.4 | 8,230 | 0.4 | |
| Paper and allied products | 25,040 | 1.4 | 29,790 | 1.3 | |

## TABLE 1 - continued

## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| | 1970 Employment | | Projected 1980 Employment | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2' | Absolute | Percent 2/ |
| electrical | 14,240 | 0.8 | 20,380 | 0.9 | 6,140 | 43 |
| y and equipment | 2,290 | 0.1 | 3,290 | 0.2 | 1,000 | 44 |
| nd related machinery | 1,450 | 0.1 | 2,080 | 0.1 | 630 | 44 |
| achinery | 1,320 | 0.1 | 1,900 | 0.1 | 570 | 43 |
| ting machines | 450 | * | 640 | * | 190 | 43 |
| .c. | 8,380 | 0.5 | 11,980 | 0.5 | 3,600 | 43 |
| ery, equipment and supplies | 11,860 | 0.7 | 17,910 | 0.8 | 6,050 | 51 |
| liances | 430 | * | 650 | * | 220 | 50 |
| mmunication equipment | 980 | 0.1 | 1,480 | 0.1 | 500 | 51 |
| hinery, n.e.c. | 10,450 | 0.6 | 15,780 | 0.7 | 5,330 | 51 |
| uipment | 47,720 | 2.7 | 42,880 | 1.9 | -4,840 | -10 |
| and equipment | 14,250 | 0.8 | 16,680 | 0.8 | 2,430 | 17 |
| rts | 25,640 | 1.4 | 14,820 | 0.7 | -10,820 | -42 |
| uilding and repairing | 1,230 | 0.1 | 1,070 | 0.1 | -160 | -13 |
| gs | 6,010 | 0.3 | 9,380 | 0.4 | 3,370 | 56 |
| llaneous transportation equipment | 420 | * | 660 | * | 240 | 55 |
| elated products | 2,840 | 0.2 | 4,700 | 0.2 | 1,860 | 66 |
| services supplies | 1,230 | 0.1 | 2,020 | 0.1 | 790 | 64 |
| nufacturing industries | 5,940 | 0.3 | 7,600 | 0.3 | 1,660 | 28 |
| / | 308,650 | 17.3 | 362,740 | 16.3 | 54,090 | 18 |
| products | 52,640 | 2.9 | 58,630 | 2.6 | 5,990 | 11 |
| | 16,260 | 0.9 | 19,430 | 0.9 | 3,170 | 20 |
| | 5,020 | 0.3 | 5,370 | 0.2 | 350 | 7 |
| eserving | 5,250 | 0.3 | 5,110 | 0.2 | -140 | -3 |
| ucts | 2,840 | 0.2 | 2,620 | 0.1 | -220 | -8 |
| s | 8,510 | 0.5 | 9,700 | 0.4 | 1,190 | 14 |
| tries | 7,470 | 0.4 | 9,150 | 0.4 | 1,680 | 22 |
| food preparation | 4,830 | 0.3 | 4,810 | 0.2 | -20 | 0 |
| cts | 115,020 | 6.4 | 129,010 | 5.8 | 13,990 | 12 |
| | 9,690 | 0.5 | 10,870 | 0.5 | 1,180 | 12 |
| ng textiles | 4,530 | 0.3 | 5,080 | 0.2 | 550 | 12 |
| s | 26,470 | 1.5 | 29,680 | 1.3 | 3,210 | 12 |
| lls | 66,170 | 3.7 | 74,230 | 3.3 | 8,060 | 12 |
| textile mill products | 8,160 | 0.5 | 9,150 | 0.4 | 990 | 12 |
| finished textile products | 70,470 | 3.9 | 85,470 | 3.8 | 15,000 | 21 |
| cessories | 63,670 | 3.6 | 77,240 | 3.5 | 13,570 | 21 |
| fabricated products | 6,800 | 0.4 | 8,230 | 0.4 | 1,430 | 21 |
| roducts | 25,040 | 1.4 | 29,790 | 1.3 | 4,750 | 19 |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| | 1970 Employment | | Projected 1980 Employment | | 1 |
|---|---|---|---|---|---|
| **Industry Title** | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absol |
| Pulp, paper, paperboard mills | 13,820 | 0.8 | 15,030 | 0.7 | 1,2 |
| Paperboard containers, boxes | 7,440 | 0.4 | 9,260 | 0.4 | 1,8 |
| Miscellaneous paper and pulp products | 3,780 | 0.2 | 5,500 | 0.2 | 1,7 |
| Printing and publishing | 15,960 | 0.9 | 20,870 | 0.9 | 4,9 |
| Newspaper publishing, printing | 6,400 | 0.4 | 8,220 | 0.4 | 1,8 |
| Printing and publishing, except news | 9,560 | 0.5 | 12,650 | 0.6 | 3,0 |
| Chemical and allied products | 13,340 | 0.8 | 17,140 | 0.8 | 3,8 |
| Industrial chemicals | 2,420 | 0.1 | 3,000 | 0.1 | 5 |
| Drugs and medicines | 810 | 0.1 | 1,320 | 0.1 | 5 |
| Soaps and cosmetics | 2,770 | 0.2 | 3,430 | 0.2 | 6 |
| Paints, varnishes | 1,590 | 0.1 | 2,260 | 0.1 | 6 |
| Agricultural chemicals | 2,400 | 0.1 | 2,970 | 0.1 | 5 |
| Miscellaneous chemicals | 1,980 | 0.1 | 2,470 | 0.1 | 4 |
| Petroleum and coal products | 940 | 0.1 | 1,550 | 0.1 | 6 |
| Rubber, miscellaneous plastic products | 9,710 | 0.5 | 14,930 | 0.7 | 5,2 |
| Rubber products | 6,030 | 0.3 | 8,050 | 0.4 | 2,0 |
| Miscellaneous plastic products | 3,680 | 0.2 | 6,880 | 0.3 | 3,2 |
| Leather and leather products | 4,800 | 0.3 | 4,670 | 0.2 | -1 |
| Footwear, except rubber | 3,760 | 0.2 | 3,660 | 0.2 | -1 |
| **Transportation and Public Utilities** | 116,750 | 6.5 | 149,470 | 6.7 | 32,7 |
| Transportation, Total | 66,560 | 3.7 | 82,980 | 3.7 | 16,4 |
| Railroads, railway express | 13,460 | 0.8 | 13,110 | 0.6 | -3 |
| Local and interurban passenger transit | 4,710 | 0.3 | 6,690 | 0.3 | 1,9 |
| Street railways, bus lines | 3,730 | 0.2 | 5,630 | 0.3 | 1,9 |
| Taxicab service | 980 | 0.1 | 1,060 | 0.1 | |
| Trucking and warehousing | 28,550 | 1.6 | 36,550 | 1.6 | 8,0 |
| Trucking service | 26,340 | 1.5 | 33,780 | 1.5 | 7,4 |
| Warehousing and storage | 2,210 | 0.1 | 2,770 | 0.1 | |
| Water transportation | 3,030 | 0.2 | 4,190 | 0.2 | 1,1 |
| Air transportation | 15,050 | 0.8 | 19,940 | 0.9 | 4, |
| Pipelines | 450 | * | 560 | * | |
| Transportation services | 1,310 | 0.1 | 1,940 | 0.1 | |
| Communications, Electric, Gas and Sanitary Services | 50,190 | 2.8 | 66,490 | 3.0 | 16, |
| Communications | 25,760 | 1.4 | 34,040 | 1.5 | 8, |
| Telephone (wire and radio) | 21,590 | 1.2 | 29,650 | 1.3 | 8, |
| Telegraph, miscellaneous communication services | 1,060 | 0.1 | 960 | * | - |
| Radio broadcasting, TV | 3,110 | 0.2 | 3,430 | 0.2 | |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| | 1970 Employment | | Projected 1980 Employment | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| aperboard mills | 13,820 | 0.8 | 15,030 | 0.7 | 1,210 | 9 |
| ntainers, boxes | 7,440 | 0.4 | 9,260 | 0.4 | 1,820 | 25 |
| paper and pulp products | 3,780 | 0.2 | 5,500 | 0.2 | 1,720 | 46 |
| ishing | 15,960 | 0.9 | 20,870 | 0.9 | 4,910 | 31 |
| blishing, printing | 6,400 | 0.4 | 8,220 | 0.4 | 1,820 | 28 |
| ublishing, except news | 9,560 | 0.5 | 12,650 | 0.6 | 3,090 | 32 |
| ied products | 13,340 | 0.8 | 17,140 | 0.8 | 3,800 | 28 |
| micals | 2,420 | 0.1 | 3,000 | 0.1 | 580 | 24 |
| icines | 810 | 0.1 | 1,320 | 0.1 | 510 | 63 |
| metics | 2,770 | 0.2 | 3,430 | 0.2 | 660 | 24 |
| hes | 1,590 | 0.1 | 2,260 | 0.1 | 670 | 42 |
| hemicals | 2,400 | 0.1 | 2,970 | 0.1 | 570 | 24 |
| chemicals | 1,980 | 0.1 | 2,470 | 0.1 | 490 | 24 |
| al products | 940 | 0.1 | 1,550 | 0.1 | 610 | 65 |
| eous plastic products | 9,710 | 0.5 | 14,930 | 0.7 | 5,220 | 54 |
| s | 6,030 | 0.3 | 8,050 | 0.4 | 2,020 | 34 |
| plastic products | 3,680 | 0.2 | 6,880 | 0.3 | 3,200 | 87 |
| er products | 4,800 | 0.3 | 4,670 | 0.2 | -130 | -3 |
| ept rubber | 3,760 | 0.2 | 3,660 | 0.2 | -100 | -3 |
| ic Utilities | 116,750 | 6.5 | 149,470 | 6.7 | 32,720 | 28 |
| l | 66,560 | 3.7 | 82,980 | 3.7 | 16,420 | 25 |
| express | 13,460 | 0.8 | 13,110 | 0.6 | -350 | -3 |
| an passenger transit | 4,710 | 0.3 | 6,690 | 0.3 | 1,980 | 42 |
| , bus lines | 3,730 | 0.2 | 5,630 | 0.3 | 1,900 | 51 |
| e | 980 | 0.1 | 1,060 | 0.1 | 80 | 8 |
| housing | 28,550 | 1.6 | 36,550 | 1.6 | 8,000 | 28 |
| ce | 26,340 | 1.5 | 33,780 | 1.5 | 7,440 | 28 |
| d storage | 2,210 | 0.1 | 2,770 | 0.1 | 560 | 25 |
| n | 3,030 | 0.2 | 4,190 | 0.2 | 1,160 | 39 |
| | 15,050 | 0.8 | 19,940 | 0.9 | 4,890 | 32 |
| | 450 | * | 560 | * | 110 | 24 |
| vices | 1,310 | 0.1 | 1,940 | 0.1 | 630 | 48 |
| tric, Gas and Sanitary Services | 50,190 | 2.8 | 66,490 | 3.0 | 16,300 | 32 |
| | 25,760 | 1.4 | 34,040 | 1.5 | 8,280 | 32 |
| and radio) | 21,590 | 1.2 | 29,650 | 1.3 | 8,060 | 37 |
| ellaneous communication services | 1,060 | 0.1 | 960 | * | -100 | -9 |
| ing, TV | 3,110 | 0.2 | 3,430 | 0.2 | 320 | 10 |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| Industry Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Employment Number 1/ | Projected 1980 Employment Percent 2/ | Abso |
|---|---|---|---|---|---|
| Electric, gas and sanitary services | 24,430 | 1.4 | 32,450 | 1.5 | 8, |
| Electric light and power | 10,790 | 0.6 | 13,450 | 0.6 | 2, |
| Electric - gas utilities | 110 | * | 160 | * | |
| Gas, steam supply systems | 3,350 | 0.2 | 4,170 | 0.2 | |
| Water supply | 2,750 | 0.2 | 3,990 | 0.2 | 1, |
| Sanitary services | 7,380 | 0.4 | 10,610 | 0.5 | 3, |
| **Wholesale and Retail Trade** | **366,270** | **20.5** | **481,680** | **21.6** | **115,** |
| Wholesale Trade | 101,040 | 5.7 | 136,460 | 6.1 | 35, |
| Wholesale, except miscellaneous wholesalers | 70,680 | 4.0 | 98,260 | 4.4 | 27, |
| Motor vehicles and equipment | 9,540 | 0.5 | 14,900 | 0.7 | 5, |
| Drugs, chemicals, allied products | 6,140 | 0.3 | 8,720 | 0.4 | 2, |
| Dry goods and apparel | 3,710 | 0.2 | 4,270 | 0.2 | |
| Food and related products | 12,510 | 0.7 | 13,510 | 0.6 | 1, |
| Farm product raw materials | 4,060 | 0.2 | 5,190 | 0.2 | 1, |
| Electrical goods | 10,100 | 0.6 | 14,540 | 0.7 | 4 |
| Hardware, plumbing and heating equipment | 5,200 | 0.3 | 7,460 | 0.3 | 2 |
| Machinery, equipment and supplies | 19,420 | 1.1 | 29,670 | 1.3 | 10 |
| Miscellaneous wholesale trade | 30,360 | 1.7 | 38,200 | 1.7 | 7 |
| Metals and minerals, n.e.c. | 2,740 | 0.2 | 3,480 | 0.2 | |
| Petroleum products | 4,200 | 0.2 | 5,240 | 0.2 | 1 |
| Scrap and waste material | 1,920 | 0.1 | 2,340 | 0.1 | |
| Alcoholic beverages | 1,730 | 0.1 | 2,200 | 0.1 | |
| Paper and its products | 3,580 | 0.2 | 4,560 | 0.2 | |
| Lumber, construction materials | 4,520 | 0.3 | 5,720 | 0.3 | |
| Wholesalers, n.e.c. | 11,670 | 0.7 | 14,660 | 0.7 | |
| Retail Trade | 265,230 | 14.8 | 345,220 | 15.5 | 79 |
| Building materials | 12,020 | 0.7 | 14,100 | 0.6 | |
| Lumber and other building materials | 6,650 | 0.4 | 7,800 | 0.4 | |
| Hardware and farm equipment | 5,370 | 0.3 | 6,300 | 0.3 | |
| General merchandise, total | 62,280 | 3.5 | 86,450 | 3.9 | 2 |
| Department and mail order stores | 39,330 | 2.2 | 57,980 | 2.6 | 1 |
| Limited price stores | 6,020 | 0.3 | 5,600 | 0.3 | |
| Vending machine operators | 1,840 | 0.1 | 2,680 | 0.1 | |
| Direct selling | 6,250 | 0.4 | 8,520 | 0.4 | |
| Miscellaneous merchandise stores | 8,840 | 0.5 | 11,670 | 0.5 | |
| Food and dairy stores | 41,440 | 2.3 | 53,050 | 2.4 | 1 |
| Grocery stores | 39,210 | 2.2 | 50,280 | 2.3 | 1 |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| | 1970 Employment | | Projected 1980 Employment | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| anitary services | 24,430 | 1.4 | 32,450 | 1.5 | 8,020 | 33 |
| nd power | 10,790 | 0.6 | 13,450 | 0.6 | 2,660 | 25 |
| tilities | 110 | * | 160 | * | 50 | 43 |
| ply systems | 3,350 | 0.2 | 4,170 | 0.2 | 820 | 24 |
| | 2,750 | 0.2 | 3,990 | 0.2 | 1,240 | 45 |
| s | 7,380 | 0.4 | 10,610 | 0.5 | 3,230 | 44 |
| de | 366,270 | 20.5 | 481,680 | 21.6 | 115,410 | 32 |
| | 101,040 | 5.7 | 136,460 | 6.1 | 35,420 | 35 |
| miscellaneous wholesalers | 70,680 | 4.0 | 98,260 | 4.4 | 27,580 | 39 |
| and equipment | 9,540 | 0.5 | 14,900 | 0.7 | 5,360 | 56 |
| ls, allied products | 6,140 | 0.3 | 8,720 | 0.4 | 2,580 | 42 |
| pparel | 3,710 | 0.2 | 4,270 | 0.2 | 560 | 15 |
| d products | 12,510 | 0.7 | 13,510 | 0.6 | 1,000 | 8 |
| w materials | 4,060 | 0.2 | 5,190 | 0.2 | 1,130 | 28 |
| | 10,100 | 0.6 | 14,540 | 0.7 | 4,440 | 44 |
| bing and heating equipment | 5,200 | 0.3 | 7,460 | 0.3 | 2,260 | 43 |
| pment and supplies | 19,420 | 1.1 | 29,670 | 1.3 | 10,250 | 53 |
| lesale trade | 30,360 | 1.7 | 38,200 | 1.7 | 7,840 | 26 |
| rals, n.e.c. | 2,740 | 0.2 | 3,480 | 0.2 | 740 | 27 |
| cts | 4,200 | 0.2 | 5,240 | 0.2 | 1,040 | 25 |
| material | 1,920 | 0.1 | 2,340 | 0.1 | 420 | 22 |
| ages | 1,730 | 0.1 | 2,200 | 0.1 | 470 | 27 |
| oducts | 3,580 | 0.2 | 4,560 | 0.2 | 980 | 27 |
| ction materials | 4,520 | 0.3 | 5,720 | 0.3 | 1,200 | 27 |
| e.c. | 11,670 | 0.7 | 14,660 | 0.7 | 2,990 | 26 |
| | 265,230 | 14.8 | 345,220 | 15.5 | 79,990 | 30 |
| | 12,020 | 0.7 | 14,100 | 0.6 | 2,080 | 17 |
| er building materials | 6,650 | 0.4 | 7,800 | 0.4 | 1,150 | 17 |
| rm equipment | 5,370 | 0.3 | 6,300 | 0.3 | 930 | 17 |
| se, total | 62,280 | 3.5 | 86,450 | 3.9 | 24,170 | 39 |
| mail order stores | 39,330 | 2.2 | 57,980 | 2.6 | 18,650 | 47 |
| ores | 6,020 | 0.3 | 5,600 | 0.3 | -420 | -7 |
| e operators | 1,840 | 0.1 | 2,680 | 0.1 | 840 | 46 |
| | 6,250 | 0.4 | 8,520 | 0.4 | 2,270 | 36 |
| erchandise stores | 8,840 | 0.5 | 11,670 | 0.5 | 2,830 | 32 |
| res | 41,440 | 2.3 | 53,050 | 2.4 | 11,610 | 28 |
| | 39,210 | 2.2 | 50,280 | 2.3 | 11,070 | 28 |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| Industry Title | 1970 Employment | | Projected 1980 Employment | | 1 |
|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolu |
| Retail bakeries | 920 | 0.1 | 1,170 | 0.1 | 2 |
| Food stores, n.e.c. | 1,220 | 0.1 | 1,490 | 0.1 | 2 |
| Automotive dealers and service stations | 45,030 | 2.5 | 52,270 | 2.4 | 7,2 |
| Motor vehicle dealers | 20,150 | 1.1 | 24,220 | 1.1 | 4,0 |
| Tire, battery and accessory dealers | 6,910 | 0.4 | 8,090 | 0.4 | 1,1 |
| Gasoline service stations | 16,240 | 0.9 | 17,990 | 0.8 | 1,7 |
| Miscellaneous vehicle dealers | 1,730 | 0.1 | 1,970 | 0.1 | 2 |
| Apparel and accessories | 15,300 | 0.9 | 18,180 | 0.8 | 2,8 |
| Apparel, accessory stores | 12,210 | 0.7 | 14,500 | 0.7 | 2,2 |
| Shoe stores | 3,090 | 0.2 | 3,680 | 0.2 | 5 |
| Furniture and appliances | 12,650 | 0.7 | 14,570 | 0.7 | 1,9 |
| Home furnishing stores | 9,410 | 0.5 | 10,840 | 0.5 | 1,4 |
| Appliance, TV, radio stores | 3,240 | 0.2 | 3,730 | 0.2 | 4 |
| Eating and drinking places | 45,430 | 2.5 | 69,090 | 3.1 | 23,6 |
| Miscellaneous retail stores | 31,080 | 1.7 | 37,510 | 1.7 | 6,4 |
| Drug stores | 10,530 | 0.6 | 13,520 | 0.6 | 2,9 |
| Liquor stores | 2,070 | 0.1 | 2,430 | 0.1 | 3 |
| Farm and garden supply stores | 3,830 | 0.2 | 4,630 | 0.2 | 8 |
| Jewelry stores | 2,410 | 0.1 | 2,870 | 0.1 | 4 |
| Fuel and ice dealers | 2,940 | 0.2 | 3,650 | 0.2 | 7 |
| Retail florists | 1,810 | 0.1 | 1,830 | 0.1 | |
| Miscellaneous retail stores | 7,490 | 0.4 | 8,580 | 0.4 | 1,0 |
| **Finance, Insurance and Real Estate** | 83,130 | 4.7 | 112,730 | 5.1 | 29,6 |
| Finance, Total | 35,600 | 2.0 | 55,780 | 2.5 | 20,1 |
| Banking | 19,340 | 1.1 | 30,000 | 1.4 | 10,6 |
| Credit agencies other than banks | 12,490 | 0.7 | 18,660 | 0.8 | 6,1 |
| Stock brokers, investment | 3,770 | 0.2 | 7,120 | 0.3 | 3,3 |
| Insurance | 29,510 | 1.7 | 35,830 | 1.6 | 6,3 |
| Real estate and Combinations of Real Estate, Insurance, Loans, Law Offices | 18,020 | 1.0 | 21,120 | 1.0 | 3,1 |
| **Services, Total 4/** | 445,490 | 24.9 | 563,700 | 25.3 | 118, |
| Hotels and Lodging Places | 18,170 | 1.0 | 27,010 | 1.2 | 8, |
| Hotels and motels | 15,470 | 0.9 | 23,700 | 1.1 | 8, |
| Lodging places, except hotels and motels | 2,700 | 0.2 | 3,310 | 0.1 | 6 |
| Other Personal Services | 33,720 | 1.9 | 38,100 | 1.7 | 4, |
| Laundry and dry cleaning plants | 17,110 | 1.0 | 17,750 | 0.8 | 6 |

## TABLE 1 - continued

## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| | 1970 Employment | | Projected 1980 Employment | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| s | 920 | 0.1 | 1,170 | 0.1 | 250 | 27 |
| .e.c. | 1,220 | 0.1 | 1,490 | 0.1 | 270 | 22 |
| s and service stations | 45,030 | 2.5 | 52,270 | 2.4 | 7,240 | 16 |
| dealers | 20,150 | 1.1 | 24,220 | 1.1 | 4,070 | 20 |
| nd accessory dealers | 6,910 | 0.4 | 8,090 | 0.4 | 1,180 | 17 |
| ce stations | 16,240 | 0.9 | 17,990 | 0.8 | 1,750 | 11 |
| vehicle dealers | 1,730 | 0.1 | 1,970 | 0.1 | 240 | 14 |
| sories | 15,300 | 0.9 | 18,180 | 0.8 | 2,880 | 19 |
| sory stores | 12,210 | 0.7 | 14,500 | 0.7 | 2,290 | 19 |
| | 3,090 | 0.2 | 3,680 | 0.2 | 590 | 19 |
| liances | 12,650 | 0.7 | 14,570 | 0.7 | 1,920 | 15 |
| g stores | 9,410 | 0.5 | 10,840 | 0.5 | 1,430 | 15 |
| , radio stores | 3,240 | 0.2 | 3,730 | 0.2 | 490 | 15 |
| g places | 45,430 | 2.5 | 69,090 | 3.1 | 23,660 | 52 |
| il stores | 31,080 | 1.7 | 37,510 | 1.7 | 6,430 | 21 |
| | 10,530 | 0.6 | 13,520 | 0.6 | 2,990 | 28 |
| | 2,070 | 0.1 | 2,430 | 0.1 | 360 | 17 |
| n supply stores | 3,830 | 0.2 | 4,630 | 0.2 | 800 | 21 |
| | 2,410 | 0.1 | 2,870 | 0.1 | 460 | 19 |
| ealers | 2,940 | 0.2 | 3,650 | 0.2 | 710 | 24 |
| | 1,810 | 0.1 | 1,830 | 0.1 | 20 | 1 |
| retail stores | 7,490 | 0.4 | 8,580 | 0.4 | 1,090 | 15 |
| **Real Estate** | **83,130** | **4.7** | **112,730** | **5.1** | **29,600** | **36** |
| | 35,600 | 2.0 | 55,780 | 2.5 | 20,180 | 57 |
| | 19,340 | 1.1 | 30,000 | 1.4 | 10,660 | 55 |
| her than banks | 12,490 | 0.7 | 18,660 | 0.8 | 6,170 | 49 |
| estment | 3,770 | 0.2 | 7,120 | 0.3 | 3,350 | 89 |
| | 29,510 | 1.7 | 35,830 | 1.6 | 6,320 | 21 |
| inations of Real Estate, w Offices | 18,020 | 1.0 | 21,120 | 1.0 | 3,100 | 17 |
| | **445,490** | **24.9** | **563,700** | **25.3** | **118,210** | **27** |
| Places | 18,170 | 1.0 | 27,010 | 1.2 | 8,840 | 49 |
| | 15,470 | 0.9 | 23,700 | 1.1 | 8,230 | 53 |
| cept hotels and motels | 2,700 | 0.2 | 3,310 | 0.1 | 610 | 23 |
| es | 33,720 | 1.9 | 38,100 | 1.7 | 4,380 | 13 |
| leaning plants | 17,110 | 1.0 | 17,750 | 0.8 | 640 | 4 |

# TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| Industry Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Employment Number 1/ | Projected 1980 Employment Percent 2/ | Absol |
|---|---|---|---|---|---|
| Beauty shops | 8,930 | 0.1 | 10,550 | 0.5 | 1,6 |
| Barber shops | 2,840 | 0.2 | 3,340 | 0.2 | 5 |
| Shoe repair shops | 450 | * | 610 | * | 1 |
| Dressmaking shops | 960 | 0.1 | 1,460 | 0.1 | 5 |
| Other personal services | 3,430 | 0.2 | 4,390 | 0.2 | 9 |
| Miscellaneous Business Services | 26,880 | 1.5 | 39,740 | 1.8 | 12,8 |
| Advertising | 1,740 | 0.1 | 2,320 | 0.1 | |
| Business management services | 2,590 | 0.1 | 3,590 | 0.2 | 1,0 |
| Commercial research and development | 300 | * | 450 | * | |
| Computer programming | 1,170 | 0.1 | 1,810 | 0.1 | |
| Detective and protective services | 1,820 | 0.1 | 2,780 | 0.1 | |
| Employment and temporary help supply services | 2,860 | 0.2 | 4,360 | 0.2 | 1, |
| Services to buildings | 8,050 | 0.5 | 12,200 | 0.6 | 4, |
| Other miscellaneous business services | 8,350 | 0.5 | 12,230 | 0.6 | 3, |
| Automobile Repair Services | 12,810 | 0.7 | 14,710 | 0.7 | 1, |
| Autobomile repair | 8,260 | 0.5 | 8,830 | 0.4 | |
| Automobile services, except repair | 4,550 | 0.3 | 5,880 | 0.3 | 1, |
| Other Repair Services | 6,740 | 0.4 | 7,660 | 0.3 | |
| Electrical repair shops | 2,870 | 0.2 | 3,310 | 0.2 | |
| Other repair services | 3,870 | 0.2 | 4,350 | 0.2 | |
| Motion Pictures, Theaters | 3,710 | 0.2 | 3,660 | 0.2 | |
| Miscellaneous Entertainment | 6,970 | 0.4 | 9,570 | 0.4 | 2, |
| Bowling alleys, billiards | 870 | 0.1 | 1,240 | 0.1 | |
| Miscellaneous entertainment | 6,100 | 0.3 | 8,330 | 0.4 | 2, |
| Medical and Other Health Services | 86,840 | 4.9 | 124,750 | 5.6 | 37, |
| Offices of physicians | 11,480 | 0.6 | 18,340 | 0.8 | 6, |
| Offices of dentists | 4,530 | 0.3 | 7,370 | 0.3 | 2, |
| Offices of chiropractors | 470 | * | 820 | * | |
| Hospitals | 55,540 | 3.1 | 74,570 | 3.4 | 19, |
| Convalescent institutions | 8,210 | 0.5 | 14,430 | 0.7 | 6, |
| Health practitioners, n.e.c. | 670 | * | 1,190 | 0.1 | |
| Health services, n.e.c. | 5,940 | 0.3 | 8,030 | 0.4 | 2 |
| Legal Services | 6,450 | 0.4 | 8,040 | 0.4 | 1 |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| | 1970 Employment | | Projected 1980 Employment | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| | 8,930 | 0.1 | 10,550 | 0.5 | 1,620 | 18 |
| | 2,840 | 0.2 | 3,340 | 0.2 | 500 | 18 |
| hops | 450 | * | 610 | * | 160 | 36 |
| shops | 960 | 0.1 | 1,460 | 0.1 | 500 | 52 |
| l services | 3,430 | 0.2 | 4,390 | 0.2 | 960 | 28 |
| usiness Services | 26,880 | 1.5 | 39,740 | 1.8 | 12,860 | 48 |
| | 1,740 | 0.1 | 2,320 | 0.1 | 580 | 33 |
| agement services | 2,590 | 0.1 | 3,590 | 0.2 | 1,000 | 38 |
| esearch and development | 300 | * | 450 | * | 150 | 50 |
| ramming | 1,170 | 0.1 | 1,810 | 0.1 | 640 | 55 |
| protective services | 1,820 | 0.1 | 2,780 | 0.1 | 960 | 53 |
| nd temporary help supply services | 2,860 | 0.2 | 4,360 | 0.2 | 1,500 | 52 |
| ildings | 8,050 | 0.5 | 12,200 | 0.6 | 4,150 | 52 |
| aneous business services | 8,350 | 0.5 | 12,230 | 0.6 | 3,880 | 47 |
| ir Services | 12,810 | 0.7 | 14,710 | 0.7 | 1,900 | 15 |
| pair | 8,260 | 0.5 | 8,830 | 0.4 | 570 | 7 |
| rvices, except repair | 4,550 | 0.3 | 5,880 | 0.3 | 1,330 | 29 |
| vices | 6,740 | 0.4 | 7,660 | 0.3 | 920 | 14 |
| air shops | 2,870 | 0.2 | 3,310 | 0.2 | 440 | 15 |
| ervices | 3,870 | 0.2 | 4,350 | 0.2 | 480 | 12 |
| Theaters | 3,710 | 0.2 | 3,660 | 0.2 | -50 | -1 |
| ntertainment | 6,970 | 0.4 | 9,570 | 0.4 | 2,600 | 37 |
| s, billiards | 870 | 0.1 | 1,240 | 0.1 | 370 | 42 |
| entertainment | 6,100 | 0.3 | 8,330 | 0.4 | 2,230 | 36 |
| r Health Services | 86,840 | 4.9 | 124,750 | 5.6 | 37,910 | 44 |
| siciane | 11,480 | 0.6 | 18,340 | 0.8 | 6,860 | 60 |
| tists | 4,530 | 0.3 | 7,370 | 0.3 | 2,840 | 63 |
| ropractors | 470 | * | 820 | * | 350 | 75 |
| | 55,540 | 3.1 | 74,570 | 3.4 | 19,030 | 34 |
| institutions | 8,210 | 0.5 | 14,430 | 0.7 | 6,220 | 76 |
| ioners, n.e.c. | 670 | * | 1,190 | 0.1 | 520 | 78 |
| s, n.e.c. | 5,940 | 0.3 | 8,030 | 0.4 | 2,090 | 35 |
| | 6,450 | 0.4 | 8,040 | 0.4 | 1,590 | 25 |

## TABLE 1 - continued
## GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980

| Industry Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Employment Number 1/ | Projected 1980 Employment Percent 2/ | 1 Absol |
|---|---|---|---|---|---|
| Educational Services | 118,600 | 6.6 | 167,360 | 7.5 | 48,7 |
| Elementary and secondary schools | 83,740 | 4.7 | 120,890 | 5.4 | 37, |
| Colleges and universities | 28,290 | 1.6 | 38,940 | 1.8 | 10, |
| Libraries | 680 | * | 950 | * | |
| Educational services, n.e.c. | 5,890 | 0.3 | 6,580 | 0.3 | |
| Nonprofit Organizations | 26,440 | 1.5 | 36,570 | 1.6 | 10, |
| Religious organizations | 13,530 | 0.8 | 18,510 | 0.8 | 4, |
| Welfare services | 5,950 | 0.3 | 8,010 | 0.4 | 2, |
| Residential welfare | 560 | * | 780 | * | |
| Nonprofit membership organizations, n.e.c. | 6,400 | 0.4 | 9,270 | 0.4 | 2, |
| Private Households | 85,300 | 4.8 | 69,070 | 3.1 | -16, |
| Other Professional and Related Services | 12,770 | 0.7 | 17,350 | 0.8 | 4, |
| Engineering and architectural services | 5,360 | 0.3 | 7,840 | 0.4 | 2, |
| Accounting, auditing | 5,750 | 0.3 | 7,850 | 0.4 | 2, |
| Miscellaneous professional services | 1,660 | 0.1 | 1,660 | 0.1 | |
| **Government, Total 5/** | 103,240 | 5.8 | 127,160 | 5.7 | 23, |
| Federal Public Administration | 68,150 | 3.8 | 68,990 | 3.1 | |
| Postal service | 14,040 | 0.8 | 15,020 | 0.7 | |
| Other federal | 54,110 | 3.0 | 53,970 | 2.4 | - |
| State Public Administration | 10,400 | 0.6 | 14,040 | 0.6 | 3, |
| Local Public Administration | 24,690 | 1.4 | 44,130 | 2.0 | 19, |

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1/ Estimates were rounded to ten's.

2/ Percents were computed from unrounded data. Percent change figures are shown as whole numbers.

3/ The 1970 and 1980 "Total, All Industries" employment in Table 1 and the "Total, All Occupations" employment shown in Table 3 diff was developed from different data sources. The occupational levels are those reported in the 1970 decennial census and are based on p residence. The 1970 industry employment estimates, based on place of work, were developed from Georgia Department of Labor, Emplo Agency records, supplemented to include self-employed persons, unpaid family workers, private household workers, and persons with a and adjusted to exclude the secondary job of multiple job holders.

4/ The sum of components will not equal the total shown due to the withholding of information for industries with less than 100 workers or disclosure of individual establishment data. Information was withheld for all industries which had been deleted from the U.S. Departme publication, County Business Patterns, 1972, for disclosure reasons.

5/ Includes public administration only. Government agencies engaged in educational and medical services and in activities commonly carr enterprises, such as agriculture, construction, transportation, etc., are classified in their appropriate industry.

"n.e.c." denotes "not elsewhere classified."

" _ " denotes "zero."

*Denotes less than 0.05.

# TABLE 1 - continued
# GEORGIA TOTAL EMPLOYMENT BY INDUSTRY, 1970
# AND PROJECTED TO 1980

| | 1970 Employment | | Projected 1980 Employment | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| es | 118,600 | 6.6 | 167,360 | 7.5 | 48,760 | 41 |
| secondary schools | 83,740 | 4.7 | 120,890 | 5.4 | 37,150 | 44 |
| iversities | 28,290 | 1.6 | 38,940 | 1.8 | 10,650 | 38 |
| | 680 | * | 950 | * | 270 | 40 |
| vices, n.e.c. | 5,890 | 0.3 | 6,580 | 0.3 | 690 | 12 |
| tions | 26,440 | 1.5 | 36,570 | 1.6 | 10,130 | 38 |
| izations | 13,530 | 0.8 | 18,510 | 0.8 | 4,980 | 37 |
| | 5,950 | 0.3 | 8,010 | 0.4 | 2,060 | 35 |
| fare | 560 | * | 780 | * | 220 | 39 |
| rship organizations, n.e.c. | 6,400 | 0.4 | 9,270 | 0.4 | 2,870 | 45 |
| | 85,300 | 4.8 | 69,070 | 3.1 | -16,230 | -19 |
| and Related Services | 12,770 | 0.7 | 17,350 | 0.8 | 4,580 | 36 |
| architectural services | 5,360 | 0.3 | 7,840 | 0.4 | 2,480 | 46 |
| iting | 5,750 | 0.3 | 7,850 | 0.4 | 2,100 | 36 |
| rofessional services | 1,660 | 0.1 | 1,660 | 0.1 | - | - |
| | 103,240 | 5.8 | 127,160 | 5.7 | 23,920 | 23 |
| inistration | 68,150 | 3.8 | 68,990 | 3.1 | 840 | 1 |
| | 14,040 | 0.8 | 15,020 | 0.7 | 980 | 7 |
| | 54,110 | 3.0 | 53,970 | 2.4 | -140 | - |
| istration | 10,400 | 0.6 | 14,040 | 0.6 | 3,640 | 35 |
| istration | 24,690 | 1.4 | 44,130 | 2.0 | 19,440 | 79 |

---

nded to ten's.
puted from unrounded data. Percent change figures are shown as whole numbers.
"Total, All Industries" employment in Table 1 and the "Total, All Occupations" employment shown in Table 3 differ because each
different data sources. The occupational levels are those reported in the 1970 decennial census and are based on place of
70 industry employment estimates, based on place of work, were developed from Georgia Department of Labor, Employment Security
pplemented to include self-employed persons, unpaid family workers, private household workers, and persons with a job but not at work,
clude the secondary job of multiple job holders.
ents will not equal the total shown due to the withholding of information for industries with less than 100 workers or to avoid
idual establishment data. Information was withheld for all industries which had been deleted from the U.S. Department of Commerce
Business Patterns, 1972, for disclosure reasons.
inistration only. Government agencies engaged in educational and medical services and in activities commonly carried on by private
s agriculture, construction, transportation, etc., are classified in their appropriate industry.
elsewhere classified."

# TABLE 2
# GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change F |
|---|---|---|---|
| Industry Title | Number 2/ | Percent of Total 3/ | 1976 2/ |
| **Total, All Industries** | 2,007,550 | 100.0 | 44,000 |
| **Agriculture, Forestry, Fisheries** | 75,920 | 3.8 | -1,850 |
| Agriculture | 72,040 | 3.6 | -1,900 |
| Agricultural production | 62,720 | 3.1 | -2,120 |
| Agricultural services, except horticultural | 5,710 | 0.3 | 140 |
| Horticultural services | 3,610 | 0.2 | 80 |
| Forestry | 3,280 | 0.2 | 50 |
| Fisheries | 600 | * | * |
| **Mining 4/** | 7,580 | 0.4 | 110 |
| Metal Mining | 430 | * | 20 |
| Nonmetallic Mining, Quarrying | 7,010 | 0.4 | 80 |
| **Construction** | 135,380 | 6.7 | 4,630 |
| General Building Contractors | 37,040 | 1.8 | 1,400 |
| General Contractors, except building | 39,870 | 2.0 | 1,290 |
| Special Trade Contractors | 58,470 | 2.9 | 1,940 |
| **Manufacturing** | 513,860 | 25.6 | 9,140 |
| Durable Goods 4/ | 178,160 | 8.9 | 3,740 |
| Lumber and wood products, except furniture | 28,780 | 1.4 | 290 |
| Logging | 7,060 | 0.4 | 20 |
| Sawmills, planing mills, millwork | 17,110 | 0.8 | 210 |
| Miscellaneous wood products | 4,610 | 0.2 | 60 |
| Furniture and fixtures | 11,110 | 0.6 | 320 |
| Stone, clay and glass products 4/ | 16,200 | 0.8 | 470 |
| Cement, concrete, plaster | 7,190 | 0.4 | 250 |
| Structural clay products | 3,380 | 0.2 | 70 |
| Pottery and related products | 250 | * | * |
| Miscellaneous nonmetallic mineral and stone products | 3,240 | 0.2 | 70 |
| Primary metal industries | 10,160 | 0.5 | 410 |
| Ferrous metal industries | 4,250 | 0.2 | 100 |
| Nonferrous metal industries | 5,910 | 0.3 | 310 |
| Fabricated metal products 4/ | 23,190 | 1.2 | 1,260 |
| Cutlery, other hardware | 400 | * | 20 |
| Fabricated structural metal products | 12,690 | 0.6 | 690 |
| Metal stamping | 3,840 | 0.2 | 210 |
| Miscellaneous fabricated metal products | 6,160 | 0.3 | 330 |

## TABLE 2
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

|  | Interpolated 1975 Employment |  | Change From 1975 To: – |  |
|---|---|---|---|---|
|  | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
|  | 2,007,550 | 100.0 | 44,000 | 220,200 |
| isheries | 75,920 | 3.8 | -1,850 | -9,220 |
|  | 72,040 | 3.6 | -1,900 | -9,500 |
| ction | 62,720 | 3.1 | -2,120 | -10,590 |
| ces, except horticultural | 5,710 | 0.3 | 140 | 670 |
| ices | 3,610 | 0.2 | 80 | 420 |
|  | 3,280 | 0.2 | 50 | 260 |
|  | 600 | * | - | 20 |
|  | 7,580 | 0.4 | 110 | 570 |
|  | 430 | * | 20 | 100 |
| Quarrying | 7,010 | 0.4 | 80 | 410 |
|  | 135,380 | 6.7 | 4,630 | 23,190 |
| tractors | 37,040 | 1.8 | 1,400 | 7,010 |
| except building | 39,870 | 2.0 | 1,290 | 6,460 |
| ctors | 58,470 | 2.9 | 1,940 | 9,720 |
|  | 513,860 | 25.6 | 9,140 | 45,730 |
|  | 178,160 | 8.9 | 3,740 | 18,690 |
| products, except furniture | 28,780 | 1.4 | 290 | 1,440 |
|  | 7,060 | 0.4 | 20 | 100 |
| ing mills, millwork | 17,110 | 0.8 | 210 | 1,050 |
| wood products | 4,610 | 0.2 | 60 | 290 |
| ures | 11,110 | 0.6 | 320 | 1,580 |
| ass products 4/ | 16,200 | 0.8 | 470 | 2,370 |
| te, plaster | 7,190 | 0.4 | 250 | 1,260 |
| products | 3,380 | 0.2 | 70 | 340 |
| ated products | 250 | * | - | 30 |
| nonmetallic mineral and stone products | 3,240 | 0.2 | 70 | 320 |
| stries | 10,160 | 0.5 | 410 | 2,030 |
| industries | 4,250 | 0.2 | 100 | 510 |
| al industries | 5,910 | 0.3 | 310 | 1,520 |
| products 4/ | 23,190 | 1.2 | 1,260 | 6,300 |
| hardware | 400 | * | 20 | 100 |
| ctural metal products | 12,690 | 0.6 | 690 | 3,440 |
|  | 3,840 | 0.2 | 210 | 1,050 |
| abricated metal products | 6,160 | 0.3 | 330 | 1,670 |

### TABLE 2 - continued
### GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Title | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change Fr<br>1976 2/ |
|---|---|---|---|
| Machinery, except electrical 4/ | 17,310 | 0.9 | 610 |
| Farm machinery and equipment | 2,790 | 0.1 | 100 |
| Construction and related machinery | 1,770 | 0.1 | 60 |
| Metalworking machinery | 1,610 | 0.1 | 60 |
| Office accounting machines | 540 | * | 20 |
| Machinery, n.e.c. | 10,180 | 0.5 | 360 |
| Electrical machinery, equipment and supplies | 14,890 | 0.7 | 600 |
| Household appliances | 540 | * | 20 |
| Radio, television, communications equipment | 1,230 | 0.1 | 50 |
| Electrical machinery, n.e.c. | 13,120 | 0.6 | 530 |
| Transportation equipment 4/ | 45,300 | 2.3 | -480 |
| Motor vehicles and equipment | 15,470 | 0.8 | 240 |
| Aircraft and parts | 20,230 | 1.0 | -1,080 |
| Ship and boat building and repairing | 1,150 | 0.1 | -20 |
| Mobile dwellings | 7,700 | 0.4 | 330 |
| Cycles, miscellaneous transportation equipment | 540 | * | 20 |
| Instruments and related products 4/ | 3,770 | 0.2 | 180 |
| Optical, health services supplies | 1,620 | 0.1 | 80 |
| Miscellaneous manufacturing industries | 6,770 | 0.3 | 170 |
| Nondurable Goods 4/ | 335,700 | 16.7 | 5,400 |
| Food and kindred products 4/ | 55,630 | 2.8 | 600 |
| Meat products | 17,850 | 0.9 | 320 |
| Dairy products | 5,190 | 0.3 | 40 |
| Canning and preserving | 5,180 | 0.3 | -20 |
| Grain mill products | 2,720 | 0.1 | -20 |
| Bakery products | 9,110 | 0.4 | 120 |
| Beverage industries | 8,310 | 0.4 | 170 |
| Miscellaneous food preparation | 4,820 | 0.2 | - |
| Textile mill products | 122,020 | 6.1 | 1,390 |
| Knitting mills | 10,270 | 0.5 | 120 |
| Dyeing, finishing textiles | 4,810 | 0.3 | 50 |
| Floor coverings | 28,080 | 1.4 | 320 |
| Yarn, fabric mills | 70,200 | 3.5 | 800 |
| Miscellaneous textile mill products | 8,660 | 0.4 | 100 |
| Apparel and other finished textile products | 77,970 | 3.9 | 1,500 |
| Apparel and accessories | 70,450 | 3.5 | 1,360 |
| Miscellaneous fabricated products | 7,520 | 0.4 | 140 |
| Paper and allied products | 27,410 | 1.4 | 470 |

# TABLE 2 - continued
# GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

|  | Interpolated 1975 Employment |  | Change From 1975 To: - |  |
|---|---|---|---|---|
|  | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| pt electrical 4/ | 17,310 | 0.9 | 610 | 3,070 |
| ery and equipment | 2,790 | 0.1 | 100 | 500 |
| and related machinery | 1,770 | 0.1 | 60 | 310 |
| machinery | 1,610 | 0.1 | 60 | 290 |
| nting machines | 540 | * | 20 | 100 |
| .e.c. | 10,180 | 0.5 | 360 | 1,800 |
| inery, equipment and supplies | 14,890 | 0.7 | 600 | 3,020 |
| ppliances | 540 | * | 20 | 110 |
| sion, communications equipment | 1,230 | 0.1 | 50 | 250 |
| chinery, n.e.c. | 13,120 | 0.6 | 530 | 2,660 |
| quipment 4/ | 45,300 | 2.3 | -480 | -2,420 |
| s and equipment | 15,470 | 0.8 | 240 | 1,210 |
| parts | 20,230 | 1.0 | -1,080 | -5,410 |
| building and repairing | 1,150 | 0.1 | -20 | -80 |
| ings | 7,700 | 0.4 | 330 | 1,680 |
| ellaneous transportation equipment | 540 | * | 20 | 120 |
| related products 4/ | 3,770 | 0.2 | 180 | 930 |
| th services supplies | 1,620 | 0.1 | 80 | 400 |
| anufacturing industries | 6,770 | 0.3 | 170 | 830 |
|  |  |  |  |  |
| 4/ | 335,700 | 16.7 | 5,400 | 27,040 |
| d products 4/ | 55,630 | 2.8 | 600 | 3,000 |
|  | 17,850 | 0.9 | 320 | 1,580 |
| s | 5,190 | 0.3 | 40 | 180 |
| preserving | 5,180 | 0.3 | -20 | -70 |
| ducts | 2,720 | 0.1 | -20 | -100 |
| cts | 9,110 | 0.4 | 120 | 590 |
| stries | 8,310 | 0.4 | 170 | 840 |
| food preparation | 4,820 | 0.2 | - | -10 |
| ucts | 122,020 | 6.1 | 1,390 | 6,990 |
|  | 10,270 | 0.5 | 120 | 600 |
| hing textiles | 4,810 | 0.3 | 50 | 270 |
| gs | 28,080 | 1.4 | 320 | 1,600 |
| ills | 70,200 | 3.5 | 800 | 4,030 |
| textile mill products | 8,660 | 0.4 | 100 | 490 |
| r finished textile products | 77,970 | 3.9 | 1,500 | 7,500 |
| ccessories | 70,450 | 3.5 | 1,360 | 6,790 |
| fabricated products | 7,520 | 0.4 | 140 | 710 |
| products | 27,410 | 1.4 | 470 | 2,380 |

### TABLE 2 - continued
### GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Title | Interpolated 1975 Employment | | Change F |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Pulp, paper, paperboard mills | 14,420 | 0.7 | 120 |
| Paperboard containers, boxes | 8,350 | 0.4 | 180 |
| Miscellaneous paper and pulp products | 4,640 | 0.2 | 170 |
| Printing and publishing | 18,410 | 0.9 | 500 |
| Newspaper publishing, printing | 7,310 | 0.4 | 190 |
| Printing and publishing, except news | 11,100 | 0.5 | 310 |
| Chemical and allied products 4/ | 15,240 | 0.8 | 380 |
| Industrial chemicals | 2,710 | 0.1 | 60 |
| Drugs and medicines | 1,070 | 0.1 | 50 |
| Soaps and cosmetics | 3,100 | 0.2 | 70 |
| Paints, varnishes | 1,920 | 0.1 | 70 |
| Agricultural chemicals | 2,690 | 0.1 | 60 |
| Miscellaneous chemicals | 2,230 | 0.1 | 40 |
| Petroleum and coal products | 1,250 | 0.1 | 60 |
| Rubber, miscellaneous plastic products | 12,320 | 0.6 | 520 |
| Rubber products | 7,040 | 0.4 | 200 |
| Miscellaneous plastic products | 5,280 | 0.3 | 320 |
| Leather and leather products 4/ | 4,740 | 0.2 | -20 |
| Footwear, except rubber | 3,710 | 0.2 | -10 |
| Transportation, Other Public Utilities 4/ | 133,110 | 6.6 | 3,270 |
| Transportation, Total | 74,760 | 3.7 | 1,650 |
| Railroads, railway express | 13,290 | 0.7 | -40 |
| Local and interurban passenger transit | 5,700 | 0.3 | 200 |
| Street railways, bus lines | 4,680 | 0.2 | 190 |
| Taxicab service | 1,020 | 0.1 | 10 |
| Trucking and warehousing | 32,550 | 1.6 | 800 |
| Trucking service | 30,060 | 1.5 | 740 |
| Warehousing and storage | 2,490 | 0.1 | 60 |
| Water transportation | 3,610 | 0.2 | 120 |
| Air transportation | 17,490 | 0.9 | 490 |
| Pipelines | 500 | * | 10 |
| Transportation services | 1,620 | 0.1 | 70 |
| Communications, Electric, Gas and Sanitary Services 4/ | 58,350 | 2.9 | 1,620 |
| Communications | 29,900 | 1.5 | 820 |
| Telephone (wire and radio) | 25,620 | 1.3 | 800 |
| Telegraph, miscellaneous communication services | 1,010 | 0.1 | -10 |
| Radio broadcasting, television | 3,270 | 0.2 | 30 |

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| aperboard mills | 14,420 | 0.7 | 120 | 610 |
| ntainers, boxes | 8,350 | 0.4 | 180 | 910 |
| paper and pulp products | 4,640 | 0.2 | 170 | 860 |
| ishing | 18,410 | 0.9 | 500 | 2,460 |
| blishing, printing | 7,310 | 0.4 | 190 | 910 |
| ublishing, except news | 11,100 | 0.5 | 310 | 1,550 |
| ied products 4/ | 15,240 | 0.8 | 380 | 1,900 |
| nicals | 2,710 | 0.1 | 60 | 290 |
| icines | 1,070 | 0.1 | 50 | 250 |
| metics | 3,100 | 0.2 | 70 | 330 |
| hes | 1,920 | 0.1 | 70 | 340 |
| emicals | 2,690 | 0.1 | 60 | 280 |
| chemicals | 2,230 | 0.1 | 40 | 240 |
| l products | 1,250 | 0.1 | 60 | 300 |
| eous plastic products | 12,320 | 0.6 | 520 | 2,610 |
| s | 7,040 | 0.4 | 200 | 1,010 |
| plastic products | 5,280 | 0.3 | 320 | 1,600 |
| er products 4/ | 4,740 | 0.2 | -20 | -70 |
| ept rubber | 3,710 | 0.2 | -10 | -50 |
| ublic Utilities 4/ | 133,110 | 6.6 | 3,270 | 16,360 |
| l | 74,760 | 3.7 | 1,650 | 8,220 |
| express | 13,290 | 0.7 | -40 | -180 |
| ban passenger transit | 5,700 | 0.3 | 200 | 990 |
| , bus lines | 4,680 | 0.2 | 190 | 950 |
| e | 1,020 | 0.1 | 10 | 40 |
| housing | 32,550 | 1.6 | 800 | 4,000 |
| ce | 30,060 | 1.5 | 740 | 3,720 |
| d storage | 2,490 | 0.1 | 60 | 280 |
| on | 3,610 | 0.2 | 120 | 580 |
| | 17,490 | 0.9 | 490 | 2,450 |
| | 500 | * | 10 | 60 |
| vices | 1,620 | 0.1 | 70 | 320 |
| ctric, Gas and Sanitary Services 4/ | 58,350 | 2.9 | 1,620 | 8,140 |
| | 29,900 | 1.5 | 820 | 4,140 |
| e and radio) | 25,620 | 1.3 | 800 | 4,030 |
| cellaneous communication services | 1,010 | 0.1 | -10 | -50 |
| ting, television | 3,270 | 0.2 | 30 | 160 |

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Title | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change<br>1976 2/ |
|---|---|---|---|
| Electric, gas and sanitary services 4/ | 28,450 | 1.4 | 800 |
| Electric light and power | 12,120 | 0.6 | 260 |
| Electric - gas utilities | 140 | * | [illegible] |
| Gas, steam supply systems | 3,760 | 0.2 | 80 |
| Water supply | 3,370 | 0.2 | 120 |
| Sanitary services | 8,990 | 0.4 | 320 |
| | | | |
| **Wholesale and Retail Trade** | 423,980 | 21.1 | 11,530 |
| Wholesale Trade | 118,750 | 5.9 | 3,540 |
| Wholesale, except miscellaneous wholesalers | 84,470 | 4.2 | 2,750 |
| Motor vehicles and equipment | 12,220 | 0.6 | 540 |
| Drugs, chemicals, allied products | 7,430 | 0.4 | 250 |
| Dry goods and apparel | 3,990 | 0.2 | 60 |
| Food and related products | 13,010 | 0.7 | 100 |
| Farm product raw materials | 4,630 | 0.2 | 110 |
| Electrical goods | 12,320 | 0.6 | 440 |
| Hardware, plumbing and heating equipment | 6,320 | 0.3 | 230 |
| Machinery, equipment and supplies | 24,550 | 1.2 | 1,020 |
| Miscellaneous wholesale trade | 34,280 | 1.7 | 790 |
| Metals and minerals, n.e.c. | 3,110 | 0.2 | 80 |
| Petroleum products | 4,720 | 0.2 | 110 |
| Scrap and waste material | 2,130 | 0.1 | 40 |
| Alcoholic beverages | 1,970 | 0.1 | 40 |
| Paper and its products | 4,070 | 0.2 | 100 |
| Lumber, construction materials | 5,120 | 0.3 | 120 |
| Wholesalers, n.e.c. | 13,160 | 0.7 | 300 |
| | | | |
| Retail Trade | 305,230 | 15.2 | 7,990 |
| Building materials | 13,060 | 0.7 | 200 |
| Lumber and other building materials | 7,230 | 0.4 | 110 |
| Hardware and farm equipment | 5,830 | 0.3 | 90 |
| General merchandise, total | 74,360 | 3.7 | 2,420 |
| Department and mail order stores | 48,650 | 2.4 | 1,870 |
| Limited price stores | 5,810 | 0.3 | -40 |
| Vending machine operators | 2,260 | 0.1 | 80 |
| Direct selling | 7,390 | 0.4 | 220 |
| Miscellaneous merchandise stores | 10,250 | 0.5 | 290 |
| Food and dairy stores 4/ | 47,250 | 2.4 | 1,160 |
| Grocery stores | 44,740 | 2.2 | 1,110 |

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| d sanitary services 4/ | 28,450 | 1.4 | 800 | 4,000 |
| and power | 12,120 | 0.6 | 260 | 1,330 |
| utilities | 140 | * | - | 20 |
| upply systems | 3,760 | 0.2 | 80 | 410 |
| | 3,370 | 0.2 | 120 | 620 |
| ices | 8,990 | 0.4 | 320 | 1,620 |
| Trade | 423,980 | 21.1 | 11,530 | 57,700 |
| | 118,750 | 5.9 | 3,540 | 17,710 |
| pt miscellaneous wholesalers | 84,470 | 4.2 | 2,750 | 13,790 |
| s and equipment | 12,220 | 0.6 | 540 | 2,680 |
| cals, allied products | 7,430 | 0.4 | 250 | 1,290 |
| d apparel | 3,990 | 0.2 | 60 | 280 |
| ted products | 13,010 | 0.7 | 100 | 500 |
| raw materials | 4,630 | 0.2 | 110 | 560 |
| ods | 12,320 | 0.6 | 440 | 2,220 |
| mbing and heating equipment | 6,320 | 0.3 | 230 | 1,140 |
| uipment and supplies | 24,550 | 1.2 | 1,020 | 5,120 |
| holesale trade | 34,280 | 1.7 | 790 | 3,920 |
| nerals, n.e.c. | 3,110 | 0.2 | 80 | 370 |
| ducts | 4,720 | 0.2 | 110 | 520 |
| ste material | 2,130 | 0.1 | 40 | 210 |
| erages | 1,970 | 0.1 | 40 | 230 |
| products | 4,070 | 0.2 | 100 | 490 |
| ruction materials | 5,120 | 0.3 | 120 | 600 |
| n.e.c. | 13,160 | 0.7 | 300 | 1,500 |
| | 305,230 | 15.2 | 7,990 | 39,990 |
| s | 13,060 | 0.7 | 200 | 1,040 |
| her building materials | 7,230 | 0.4 | 110 | 570 |
| farm equipment | 5,330 | 0.3 | 90 | 470 |
| dise, total | 74,360 | 3.7 | 2,420 | 12,090 |
| d mail order stores | 48,650 | 2.4 | 1,870 | 9,330 |
| stores | 5,810 | 0.3 | -40 | -210 |
| ine operators | 2,260 | 0.1 | 80 | 420 |
| | 7,390 | 0.4 | 220 | 1,130 |
| merchandise stores | 10,250 | 0.5 | 290 | 1,420 |
| tores 4/ | 47,250 | 2.4 | 1,160 | 5,800 |
| s | 44,740 | 2.2 | 1,110 | 5,540 |

# TABLE 2 - continued
# GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Title | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change Fro<br>1976 2/ |
|---|---|---|---|
| Retail bakeries | 1,050 | 0.1 | 20 |
| Food stores, n.e.c. | 1,350 | 0.1 | 30 |
| Automotive dealers and service stations | 48,650 | 2.4 | 730 |
| Motor vehicle dealers | 22,190 | 1.1 | 400 |
| Tire, battery and accessory dealers | 7,500 | 0.4 | 120 |
| Gasoline service stations | 17,110 | 0.9 | 180 |
| Miscellaneous vehicle dealers | 1,850 | 0.1 | 30 |
| Apparel and accessories | 16,740 | 0.8 | 290 |
| Apparel, accessory stores | 13,350 | 0.7 | 230 |
| Shoe stores | 3,390 | 0.2 | 60 |
| Furniture and appliances | 13,610 | 0.7 | 190 |
| Home furnishing stores | 10,130 | 0.5 | 140 |
| Appliance, television, radio stores | 3,480 | 0.2 | 50 |
| Eating and drinking places | 57,260 | 2.9 | 2,360 |
| Miscellaneous retail stores | 34,300 | 1.7 | 640 |
| Drug stores | 12,030 | 0.6 | 300 |
| Liquor stores | 2,260 | 0.1 | 30 |
| Farm and garden supply stores | 4,230 | 0.2 | 80 |
| Jewelry stores | 2,640 | 0.1 | 50 |
| Fuel and ice dealers | 3,290 | 0.2 | 70 |
| Retail florists | 1,820 | 0.1 | - |
| Miscellaneous retail stores | 8,030 | 0.4 | 110 |
| **Finance, Insurance and Real Estate** | 97,930 | 4.9 | 2,960 |
| Finance, Total | 45,690 | 2.3 | 2,020 |
| Banking | 24,670 | 1.2 | 1,070 |
| Credit agencies other than banks | 15,570 | 0.8 | 620 |
| Stock brokers, investment | 5,450 | 0.3 | 330 |
| Insurance | 32,670 | 1.6 | 630 |
| Real Estate and Combinations of real estate, insurance, loans, law offices | 19,570 | 1.0 | 310 |
| **Services, Total 4/** | 504,590 | 25.1 | 11,820 |
| Hotels and Lodging Places | 22,590 | 1.1 | 880 |
| Hotels and motels | 19,590 | 1.0 | 820 |
| Lodging places, except hotels and motels | 3,000 | 0.1 | 60 |
| Other Personal Services | 35,900 | 1.8 | 440 |
| Laundry and dry cleaning plants | 17,430 | 0.9 | 70 |

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 1,050 | 0.1 | 20 | 120 |
| .e.c. | 1,350 | 0.1 | 30 | 140 |
| s and service stations | 48,650 | 2.4 | 730 | 3,620 |
| dealers | 22,190 | 1.1 | 400 | 2,030 |
| nd accessory dealers | 7,500 | 0.4 | 120 | 590 |
| ce stations | 17,110 | 0.9 | 180 | 880 |
| vehicle dealers | 1,850 | 0.1 | 30 | 120 |
| ssories | 16,740 | 0.8 | 290 | 1,440 |
| sory stores | 13,350 | 0.7 | 230 | 1,150 |
| | 3,390 | 0.2 | 60 | 290 |
| liances | 13,610 | 0.7 | 190 | 960 |
| g stores | 10,130 | 0.5 | 140 | 710 |
| vision, radio stores | 3,480 | 0.2 | 50 | 250 |
| g places | 57,260 | 2.9 | 2,360 | 11,830 |
| il stores | 34,300 | 1.7 | 640 | 3,210 |
| | 12,030 | 0.6 | 300 | 1,490 |
| | 2,260 | 0.1 | 30 | 170 |
| n supply stores | 4,230 | 0.2 | 80 | 400 |
| | 2,640 | 0.1 | 50 | 230 |
| alers | 3,290 | 0.2 | 70 | 360 |
| | 1,820 | 0.1 | - | 10 |
| retail stores | 8,030 | 0.4 | 110 | 550 |
| Real Estate | 97,930 | 4.9 | 2,960 | 14,800 |
| | 45,690 | 2.3 | 2,020 | 10,090 |
| | 24,670 | 1.2 | 1,070 | 5,330 |
| her than banks | 15,570 | 0.8 | 620 | 3,090 |
| estment | 5,450 | 0.3 | 330 | 1,670 |
| | 32,670 | 1.6 | 630 | 3,160 |
| binations of real estate, insurance, loans, law offices | 19,570 | 1.0 | 310 | 1,550 |
| | 504,590 | 25.1 | 11,820 | 59,110 |
| laces | 22,590 | 1.1 | 880 | 4,420 |
| | 19,590 | 1.0 | 820 | 4,110 |
| cept hotels and motels | 3,000 | 0.1 | 60 | 310 |
| es | 35,900 | 1.8 | 440 | 2,200 |
| eaning plants | 17,430 | 0.9 | 70 | 320 |

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Title | Interpolated 1975 Employment | | Change Fro |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Beauty shops | 9,740 | 0.5 | 160 |
| Barber shops | 3,090 | 0.2 | 50 |
| Shoe repair shops | 530 | * | 10 |
| Dressmaking shops | 1,200 | 0.1 | 50 |
| Other personal services | 3,910 | 0.2 | 100 |
| Miscellaneous Business Services | 33,310 | 1.7 | 1,290 |
| Advertising | 2,030 | 0.1 | 60 |
| Business management services | 3,090 | 0.2 | 100 |
| Commercial research and development | 380 | * | 20 |
| Computer programming | 1,490 | 0.1 | 60 |
| Detective and protective services | 2,300 | 0.1 | 90 |
| Employment and temporary help supply services | 3,610 | 0.2 | 150 |
| Services to buildings | 10,120 | 0.5 | 420 |
| Other miscellaneous business services | 10,290 | 0.5 | 390 |
| Automobile Repair Services | 13,760 | 0.7 | 190 |
| Automobile repair | 8,550 | 0.4 | 50 |
| Automobile services, except repair | 5,210 | 0.3 | 140 |
| Other Repair Services | 7,190 | 0.4 | 90 |
| Electrical repair shops | 3,090 | 0.2 | 40 |
| Other repair services | 4,100 | 0.2 | 50 |
| Motion Pictures, Theaters | 3,680 | 0.2 | * |
| Miscellaneous Entertainment | 8,270 | 0.4 | 260 |
| Bowling alleys, billiards | 1,050 | 0.1 | 40 |
| Miscellaneous entertainment | 7,220 | 0.4 | 220 |
| Medical and Other Health Services | 105,790 | 5.3 | 3,790 |
| Offices of physicians | 14,910 | 0.7 | 690 |
| Offices of dentists | 5,950 | 0.3 | 280 |
| Offices of chiropractors | 650 | * | 10 |
| Hospitals | 65,050 | 3.2 | 1,900 |
| Convalescent institutions | 11,320 | 0.6 | 620 |
| Health practitioners, n.e.c. | 930 | 0.1 | 50 |
| Health services, n.e.c. | 6,980 | 0.4 | 210 |
| Legal Services | 7,250 | 0.4 | 160 |

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 9,740 | 0.5 | 160 | 810 |
| | 3,090 | 0.2 | 50 | 250 |
| ops | 530 | * | 10 | 80 |
| shops | 1,200 | 0.1 | 50 | 260 |
| l services | 3,910 | 0.2 | 100 | 480 |
| usiness Services | 33,310 | 1.7 | 1,290 | 6,430 |
| | 2,030 | 0.1 | 60 | 290 |
| agement services | 3,090 | 0.2 | 100 | 500 |
| search and development | 380 | * | 20 | 70 |
| ramming | 1,490 | 0.1 | 60 | 320 |
| protective services | 2,300 | 0.1 | 90 | 480 |
| nd temporary help supply services | 3,610 | 0.2 | 150 | 750 |
| ildings | 10,120 | 0.5 | 420 | 2,080 |
| neous business services | 10,290 | 0.5 | 390 | 1,940 |
| ir Services | 13,760 | 0.7 | 190 | 950 |
| pair | 8,550 | 0.4 | 50 | 280 |
| rvices, except repair | 5,210 | 0.3 | 140 | 670 |
| ices | 7,190 | 0.4 | 90 | 470 |
| air shops | 3,090 | 0.2 | 40 | 220 |
| ervices | 4,100 | 0.2 | 50 | 250 |
| Theaters | 3,680 | 0.2 | - | -20 |
| tertainment | 8,270 | 0.4 | 260 | 1,300 |
| , billiards | 1,050 | 0.1 | 40 | 190 |
| entertainment | 7,220 | 0.4 | 220 | 1,110 |
| r Health Services | 105,790 | 5.3 | 3,790 | 18,960 |
| sicians | 14,910 | 0.7 | 690 | 3,430 |
| tists | 5,950 | 0.3 | 280 | 1,420 |
| opractors | 650 | * | 40 | 170 |
| | 65,050 | 3.2 | 1,900 | 9,520 |
| institutions | 11,320 | 0.6 | 620 | 3,110 |
| oners, n.e.c. | 930 | 0.1 | 50 | 260 |
| s, n.e.c. | 6,980 | 0.4 | 210 | 1,050 |
| | 7,250 | 0.4 | 160 | 790 |

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Industry Title | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change Fr<br>1976 2/ |
|---|---|---|---|
| Educational Services | 142,980 | 7.1 | 4,870 |
| Elementary and secondary schools | 102,320 | 5.1 | 3,710 |
| Colleges and universities | 33,620 | 1.7 | 1,060 |
| Libraries | 810 | * | 30 |
| Educational services, n.e.c. | 6,230 | 0.3 | 70 |
| Nonprofit Organizations | 31,510 | 1.6 | 1,010 |
| Religious organizations | 16,020 | 0.8 | 500 |
| Welfare services | 6,980 | 0.4 | 200 |
| Residential welfare | 680 | * | 20 |
| Nonprofit membership organizations, n.e.c. | 7,830 | 0.4 | 290 |
| Private Households | 77,190 | 3.8 | -1,620 |
| Other Professional and Related Services | 15,060 | 0.8 | 460 |
| Engineering and architectural services | 6,600 | 0.3 | 250 |
| Accounting auditing | 6,800 | 0.3 | 210 |
| Miscellaneous professional services | 1,660 | 0.1 | - |
| Government, Total 5/ | 115,200 | 5.7 | 2,390 |
| Federal Public Administration | 68,570 | 3.4 | 80 |
| Postal service | 14,530 | 0.7 | 100 |
| Other federal | 54,040 | 2.7 | -20 |
| State Public Administration | 12,220 | 0.6 | 360 |
| Local Public Administration | 34,410 | 1.7 | 1,950 |

---

1/ Industry employment levels for 1975 and the change from 1975 to 1976 and 1980 are the result of simple interpolations of the projected lo labor market trend and should not be interpreted as representing cyclical fluctuations in the economy. (See Table 1 for 1970 and projecte employment levels.)

2/ Estimates were rounded to tens.

3/ Percents were computed from unrounded data and may not add to 100.0.

4/ The sum of components will not equal the total shown due to the withholding of information for industries with less than 100 workers in disclosure of individual establishment data.

5/ Includes public administration only. Government agencies engaged in educational and medical services and in activities commonly carri enterprises, such as agriculture, construction, transportation, etc., are classified in their appropriate industry.

"n.e.c." denotes "not elsewhere classified."
*denotes "less than 0.05 percent."
" _ " denotes "zero."

## TABLE 2 - continued
## GEORGIA INDUSTRY EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| s | 142,980 | 7.1 | 4,870 | 24,380 |
| secondary schools | 102,320 | 5.1 | 3,710 | 18,570 |
| versities | 33,620 | 1.7 | 1,060 | 5,320 |
| | 810 | * | 30 | 140 |
| vices, n.e.c. | 6,230 | 0.3 | 70 | 350 |
| ions | 31,510 | 1.6 | 1,010 | 5,060 |
| zations | 16,020 | 0.8 | 500 | 2,490 |
| | 6,980 | 0.4 | 200 | 1,030 |
| are | 680 | * | 20 | 100 |
| rship organizations, n.e.c. | 7,830 | 0.4 | 290 | 1,440 |
| | 77,190 | 3.8 | -1,620 | -8,120 |
| and Related Services | 15,060 | 0.8 | 460 | 2,290 |
| architectural services | 6,600 | 0.3 | 250 | 1,240 |
| ing | 6,800 | 0.3 | 210 | 1,050 |
| ofessional services | 1,660 | 0.1 | - | - |
| | 115,200 | 5.7 | 2,390 | 11,960 |
| inistration | 68,570 | 3.4 | 80 | 420 |
| | 14,530 | 0.7 | 100 | 490 |
| | 54,040 | 2.7 | -20 | -70 |
| stration | 12,220 | 0.6 | 360 | 1,820 |
| istration | 34,410 | 1.7 | 1,950 | 9,720 |

nt levels for 1975 and the change from 1975 to 1976 and 1980 are the result of simple interpolations of the projected long-run (1970-1980) and should not be interpreted as representing cyclical fluctuations in the economy. (See Table 1 for 1970 and projected 1980 industry .)

nded to tens.

puted from unrounded data and may not add to 100.0.

ents will not equal the total shown due to the withholding of information for industries with less than 100 workers in 1970 or to avoid idual establishment data.

inistration only. Government agencies engaged in educational and medical services and in activities commonly carried on by private s agriculture, construction, transportation, etc., are classified in their appropriate industry.

elsewhere classified."
05 percent."

# TABLE 3
# GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment<br>Number 1/ | <br>Percent 2/ | Projected 1980 Requirements<br>Number 1/ | <br>Percent 2/ | Abso |
|---|---|---|---|---|---|
| **Total, All Occupations 3/** | 1,587,800 | 100.0 | 1,987,990 | 100.0 | 400, |
| **Professional, Technical and Kindred Workers** | 199,470 | 12.6 | 269,480 | 13.6 | 70, |
| Engineers, Technical | 18,380 | 1.2 | 23,190 | 1.2 | 4, |
| Aeronautical and astronautical | 2,360 | 0.2 | 2,050 | 0.1 | - |
| Chemical | 530 | * | 650 | * | |
| Civil | 3,770 | 0.2 | 4,960 | 0.3 | 1, |
| Electrical and electronic | 3,480 | 0.2 | 4,560 | 0.2 | 1, |
| Industrial | 3,140 | 0.2 | 4,070 | 0.2 | |
| Mechanical | 1,680 | 0.1 | 2,090 | 0.1 | |
| Metallurgical and materials | 180 | * | 250 | * | |
| Mining | 10 | * | 10 | * | |
| Petroleum | 20 | * | 30 | * | |
| Sales | 1,080 | 0.1 | 1,570 | 0.1 | |
| Other engineers | 2,130 | 0.1 | 2,950 | 0.2 | |
| Life and Physical Scientists | 2,600 | 0.2 | 3,270 | 0.2 | |
| Agricultural | 360 | * | 410 | * | |
| Atmospheric and space | 100 | * | 120 | * | |
| Biological | 630 | * | 800 | * | |
| Chemists | 1,270 | 0.1 | 1,650 | 0.1 | |
| Geologists | 80 | * | 100 | * | |
| Marine | 40 | * | 70 | * | |
| Physicists and astronomers | 80 | * | 90 | * | |
| Life and physical scientists, n.e.c. | 40 | * | 30 | * | |
| Mathematical Specialists | 500 | * | 650 | * | |
| Actuaries | 100 | * | 130 | * | |
| Mathematicians | 40 | * | 50 | * | |
| Statisticians | 360 | * | 470 | * | |
| Engineering and Science Technicians | 12,840 | 0.8 | 18,830 | 1.0 | 5, |
| Agriculture and biological technicians, except health | 720 | * | 1,070 | 0.1 | |
| Chemical technicians | 810 | 0.1 | 1,050 | 0.1 | |
| Draftsmen | 3,780 | 0.2 | 5,580 | 0.3 | 1, |
| Electrical and electronic technicians | 2,100 | 0.1 | 2,760 | 0.1 | |
| Industrial engineering technicians | 510 | * | 490 | * | |
| Mathematical technicians | 10 | * | 10 | * | |

# TABLE 3
# GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| 3/ | 1,587,800 | 100.0 | 1,987,990 | 100.0 | 400,190 | 25 |
| al and Kindred Workers | 199,470 | 12.6 | 269,480 | 13.6 | 70,010 | 35 |
| al | 18,380 | 1.2 | 23,190 | 1.2 | 4,810 | 26 |
| astronautical | 2,360 | 0.2 | 2,050 | 0.1 | -310 | -13 |
| | 530 | * | 650 | * | 120 | 23 |
| | 3,770 | 0.2 | 4,960 | 0.3 | 1,190 | 32 |
| lectronic | 3,480 | 0.2 | 4,560 | 0.2 | 1,080 | 31 |
| | 3,140 | 0.2 | 4,070 | 0.2 | 930 | 30 |
| | 1,680 | 0.1 | 2,090 | 0.1 | 410 | 25 |
| materials | 180 | * | 250 | * | 70 | 41 |
| | 10 | * | 10 | * | - | -12 |
| | 20 | * | 30 | * | 10 | 16 |
| | 1,080 | 0.1 | 1,570 | 0.1 | 490 | 45 |
| | 2,130 | 0.1 | 2,950 | 0.2 | 820 | 38 |
| cientists | 2,600 | 0.2 | 3,270 | 0.2 | 670 | 26 |
| | 360 | * | 410 | * | 50 | 15 |
| space | 100 | * | 120 | * | 20 | 17 |
| | 630 | * | 800 | * | 170 | 26 |
| | 1,270 | 0.1 | 1,650 | 0.1 | 380 | 30 |
| | 80 | * | 100 | * | 20 | 32 |
| | 40 | * | 70 | * | 30 | 56 |
| stronomers | 80 | * | 90 | * | 10 | 6 |
| l scientists, n.e.c. | 40 | * | 30 | * | -10 | -14 |
| lists | 500 | * | 650 | * | 150 | 31 |
| | 100 | * | 130 | * | 30 | 28 |
| | 40 | * | 50 | * | 10 | 31 |
| | 360 | * | 470 | * | 110 | 32 |
| ence Technicians | 12,840 | 0.8 | 18,830 | 1.0 | 5,990 | 47 |
| iological technicians, except health | 720 | * | 1,070 | 0.1 | 350 | 50 |
| cians | 810 | 0.1 | 1,050 | 0.1 | 240 | 30 |
| | 3,780 | 0.2 | 5,580 | 0.3 | 1,800 | 48 |
| ectronic technicians | 2,100 | 0.1 | 2,760 | 0.1 | 660 | 32 |
| ering technicians | 510 | * | 490 | * | -20 | -4 |
| hnicians | 10 | * | 10 | * | - | -30 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment | | Projected 1980 Requirements | | |
|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Abso |
| Mechanical engineering technicians | 140 | * | 120 | * | |
| Surveyors | 1,570 | 0.1 | 2,200 | 0.1 | |
| Engineering and science technicians, n.e.c. | 3,200 | 0.2 | 5,550 | 0.3 | 2, |
| Medical and Health Workers, except Technicians | 26,300 | 1.7 | 35,920 | 1.8 | 9, |
| Chiropractors | 230 | * | 410 | * | |
| Dentists | 1,460 | 0.1 | 2,290 | 0.1 | |
| Dietitians | 1,130 | 0.1 | 1,480 | 0.1 | |
| Optometrists | 260 | * | 410 | * | |
| Pharmacists | 2,300 | 0.1 | 2,830 | 0.1 | |
| Physicians, medical and osteopathic | 4,600 | 0.3 | 6,170 | 0.3 | 1, |
| Podiatrists | 50 | * | 80 | * | |
| Registered nurses | 14,670 | 0.9 | 19,120 | 1.0 | 4, |
| Therapists | 1,040 | 0.1 | 1,750 | 0.1 | |
| Veterinarians | 540 | * | 1,350 | 0.1 | |
| Other medical and health | 20 | * | 30 | * | |
| Health Technologists and Technicians | 5,290 | 0.3 | 9,190 | 0.5 | 3, |
| Clinical laboratory technologists and technicians | 2,370 | 0.2 | 4,000 | 0.2 | 1, |
| Dental hygienists | 470 | * | 1,110 | 0.1 | |
| Health record technologists and technicians | 240 | * | 530 | * | |
| Radiologic technologists and technicians | 930 | 0.1 | 1,360 | 0.1 | |
| Therapy assistants | 60 | * | 110 | * | |
| Other health technologists and technicians | 1,220 | 0.1 | 2,080 | 0.1 | |
| Technicians, except Health, and Engineering and Science | 5,340 | 0.3 | 7,490 | 0.4 | 2, |
| Airplane pilots | 2,260 | 0.1 | 3,020 | 0.2 | |
| Air traffic controllers | 1,080 | 0.1 | 1,210 | 0.1 | |
| Embalmers | 150 | * | 150 | * | |
| Flight engineers | 350 | * | 480 | * | |
| Radio operators | 610 | * | 900 | 0.1 | |
| Tool programers, numerical control | 40 | * | 40 | * | |
| Technicians, n.e.c. | 850 | 0.1 | 1,690 | 0.1 | |
| Computer Specialists | 3,530 | 0.2 | 4,800 | 0.2 | 1, |
| Computer programers | 2,360 | 0.2 | 3,120 | 0.2 | |
| Computer systems analysts | 970 | 0.1 | 1,410 | 0.1 | |
| Computer specialists, n.e.c. | 200 | * | 270 | * | |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| neering technicians | 140 | * | 120 | * | -20 | -13 |
| | 1,570 | 0.1 | 2,200 | 0.1 | 630 | 40 |
| science technicians, n.e.c. | 3,200 | 0.2 | 5,550 | 0.3 | 2,350 | 73 |
| Workers, except Technicians | 26,300 | 1.7 | 35,920 | 1.8 | 9,620 | 37 |
| | 230 | * | 410 | * | 180 | 78 |
| | 1,460 | 0.1 | 2,290 | 0.1 | 830 | 57 |
| | 1,130 | 0.1 | 1,480 | 0.1 | 350 | 31 |
| | 260 | * | 410 | * | 150 | 59 |
| | 2,300 | 0.1 | 2,830 | 0.1 | 530 | 23 |
| lical and osteopathic | 4,600 | 0.3 | 6,170 | 0.3 | 1,570 | 34 |
| | 50 | * | 80 | * | 30 | 55 |
| s | 14,670 | 0.9 | 19,120 | 1.0 | 4,450 | 30 |
| | 1,040 | 0.1 | 1,750 | 0.1 | 710 | 68 |
| | 540 | * | 1,350 | 0.1 | 810 | 150 |
| d health | 20 | * | 30 | * | 10 | 107 |
| ts and Technicians | 5,290 | 0.3 | 9,190 | 0.5 | 3,900 | 74 |
| ry technologists and technicians | 2,370 | 0.2 | 4,000 | 0.2 | 1,630 | 69 |
| s | 470 | * | 1,110 | 0.1 | 640 | 135 |
| chnologists and technicians | 240 | * | 530 | * | 290 | 122 |
| ologists and technicians | 930 | 0.1 | 1,360 | 0.1 | 430 | 46 |
| ts | 60 | * | 110 | * | 50 | 78 |
| nologists and technicians | 1,220 | 0.1 | 2,080 | 0.1 | 860 | 71 |
| Health, and Engineering and Science | 5,340 | 0.3 | 7,490 | 0.4 | 2,150 | 40 |
| | 2,260 | 0.1 | 3,020 | 0.2 | 760 | 34 |
| llers | 1,080 | 0.1 | 1,210 | 0.1 | 130 | 12 |
| | 150 | * | 150 | * | - | -1 |
| | 350 | * | 480 | * | 130 | 38 |
| | 610 | * | 900 | 0.1 | 290 | 49 |
| numerical control | 40 | * | 40 | * | - | -8 |
| c. | 850 | 0.1 | 1,690 | 0.1 | 840 | 98 |
| | 3,530 | 0.2 | 4,800 | 0.2 | 1,270 | 36 |
| ers | 2,360 | 0.2 | 3,120 | 0.2 | 760 | 32 |
| analysts | 970 | 0.1 | 1,410 | 0.1 | 440 | 45 |
| ists, n.e.c. | 200 | * | 270 | * | 70 | 36 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment | | Projected 1980 Requirements | |
|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ |
| Social Scientists | 1,490 | 0.1 | 2,560 | 0.1 |
| Economists | 950 | 0.1 | 1,480 | 0.1 |
| Political scientists | 20 | * | 30 | * |
| Psychologists | 220 | * | 430 | * |
| Sociologists | 40 | * | 50 | * |
| Urban and regional planners | 200 | * | 470 | * |
| Social scientists, n.e.c. | 60 | * | 100 | * |
| Teachers | 65,190 | 4.1 | 82,400 | 4.1 |
| Adult education teachers | 1,430 | 0.1 | 1,590 | 0.1 |
| Agriculture teachers | 120 | * | 140 | * |
| Art, drama, music teachers | 410 | * | 580 | * |
| Atmospheric, earth, marine | 70 | * | 110 | * |
| Biology teachers | 360 | * | 530 | * |
| Business, commerce teachers | 230 | * | 350 | * |
| Chemistry teachers | 250 | * | 280 | * |
| Coaches, physical education | 290 | * | 340 | * |
| Economics teachers | 200 | * | 270 | * |
| Education teachers | 90 | * | 100 | * |
| Elementary school teachers | 31,450 | 2.0 | 39,960 | 2.0 |
| Engineering teachers | 210 | * | 240 | * |
| English teachers | 590 | * | 710 | * |
| Foreign language teachers | 330 | * | 500 | * |
| Health specialties teachers | 580 | * | 1,080 | 0.1 |
| History teachers | 320 | * | 340 | * |
| Home economics teachers | 90 | * | 120 | * |
| Law teachers | 80 | * | 120 | * |
| Mathematics teachers | 510 | * | 700 | * |
| Physics teachers | 220 | * | 200 | * |
| Preschool, kindergarten teachers | 3,320 | 0.2 | 4,550 | 0.2 |
| Psychology teachers | 280 | * | 470 | * |
| Secondary school teachers | 17,430 | 1.1 | 20,450 | 1.0 |
| Sociology teachers | 120 | * | 240 | * |
| Social science teachers, n.e.c. | 190 | * | 300 | * |
| Miscellaneous college and university | 310 | * | 510 | * |
| College, university, n.e.c. | 2,600 | 0.2 | 3,920 | 0.2 |
| Theology teachers | 60 | * | 100 | * |
| Trade, industrial teachers | 60 | * | 110 | * |
| Teachers, n.e.c., except college, university | 2,990 | 0.2 | 3,490 | 0.2 |

### TABLE 3 - continued
### GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| | 1,490 | 0.1 | 2,560 | 0.1 | 1,070 | 72 |
| | 950 | 0.1 | 1,480 | 0.1 | 530 | 56 |
| | 20 | * | 30 | * | 10 | 69 |
| | 220 | * | 430 | * | 210 | 94 |
| | 40 | * | 50 | * | 10 | 50 |
| planners | 200 | * | 470 | * | 270 | 128 |
| e.c. | 60 | * | 100 | * | 40 | 62 |
| | 65,190 | 4.1 | 82,400 | 4.1 | 17,210 | 26 |
| chers | 1,430 | 0.1 | 1,590 | 0.1 | 160 | 11 |
| | 120 | * | 140 | * | 20 | 18 |
| achers | 410 | * | 580 | * | 170 | 40 |
| marine | 70 | * | 110 | * | 40 | 59 |
| | 360 | * | 530 | * | 170 | 48 |
| teachers | 230 | * | 350 | * | 120 | 50 |
| | 250 | * | 280 | * | 30 | 10 |
| ducation | 290 | * | 340 | * | 50 | 19 |
| | 200 | * | 270 | * | 70 | 34 |
| | 90 | * | 100 | * | 10 | 17 |
| eachers | 31,450 | 2.0 | 39,960 | 2.0 | 8,510 | 27 |
| s | 210 | * | 240 | * | 30 | 14 |
| | 590 | * | 710 | * | 120 | 21 |
| achers | 330 | * | 500 | * | 170 | 50 |
| eachers | 580 | * | 1,080 | 0.1 | 500 | 86 |
| | 320 | * | 340 | * | 20 | 5 |
| chers | 90 | * | 120 | * | 30 | 41 |
| | 80 | * | 120 | * | 40 | 61 |
| s | 510 | * | 700 | * | 190 | 38 |
| | 220 | * | 200 | * | -20 | -10 |
| ten teachers | 3,320 | 0.2 | 4,550 | 0.2 | 1,230 | 37 |
| | 280 | * | 470 | * | 190 | 68 |
| achers | 17,430 | 1.1 | 20,450 | 1.0 | 3,020 | 17 |
| | 120 | * | 240 | * | 120 | 104 |
| ers, n.e.c. | 190 | * | 300 | * | 110 | 61 |
| ge and university | 310 | * | 510 | * | 200 | 62 |
| n.e.c. | 2,600 | 0.2 | 3,920 | 0.2 | 1,320 | 50 |
| | 60 | * | 100 | * | 40 | 68 |
| chers | 60 | * | 110 | * | 50 | 77 |
| cept college, university | 2,990 | 0.2 | 3,490 | 0.2 | 500 | 17 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment | | Projected 1980 Requirements | | 1 |
|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absol |
| Writers, Artists and Entertainers | 10,970 | 0.7 | 14,910 | 0.8 | 3,9 |
| Actors | 70 | * | 70 | * | |
| Athletes and kindred workers | 890 | 0.1 | 1,290 | 0.1 | 4 |
| Authors | 210 | * | 230 | * | 2 |
| Dancers | 90 | * | 130 | * | 4 |
| Designers | 1,190 | 0.1 | 1,660 | 0.1 | 4 |
| Editors and reporters | 1,880 | 0.1 | 2,690 | 0.1 | 8 |
| Musicians and composers | 1,430 | 0.1 | 1,860 | 0.1 | 4 |
| Painters and sculptors | 1,530 | 0.1 | 1,910 | 0.1 | 3 |
| Photographers | 1,100 | 0.1 | 1,470 | 0.1 | 3 |
| Public relations men and publicity writers | 1,230 | 0.1 | 1,770 | 0.1 | 5 |
| Radio and television announcers | 640 | * | 740 | * | 1 |
| Writers, artists and entertainers, n.e.c. | 710 | * | 1,090 | 0.1 | 3 |
| Other Professional, Technical and Kindred Workers | 47,040 | 3.0 | 66,270 | 3.3 | 19,2 |
| Accountants | 13,900 | 0.9 | 17,910 | 0.9 | 4,0 |
| Architects | 1,070 | 0.1 | 1,660 | 0.1 | 5 |
| Archivists and curators | 70 | * | 90 | * | |
| Clergymen | 5,700 | 0.4 | 7,640 | 0.4 | 1,9 |
| Religious workers, except clergymen | 720 | 0.1 | 970 | 0.1 | 2 |
| Farm management advisors | 300 | * | 260 | * | - |
| Foresters and conservationists | 1,870 | 0.1 | 2,450 | 0.1 | 5 |
| Home management advisors | 190 | * | 180 | * | - |
| Judges | 250 | * | 300 | * | |
| Lawyers | 4,100 | 0.3 | 5,490 | 0.3 | 1,3 |
| Librarians | 2,660 | 0.2 | 3,640 | 0.2 | 9 |
| Operations and system researchers and analysts | 1,270 | 0.1 | 1,980 | 0.1 | 7 |
| Personnel and labor relations workers | 6,180 | 0.4 | 9,780 | 0.5 | 3,6 |
| Research workers, n.e.c. | 1,870 | 0.1 | 2,820 | 0.1 | 9 |
| Recreation workers | 980 | 0.1 | 1,500 | 0.1 | 5 |
| Social workers | 3,980 | 0.3 | 5,850 | 0.3 | 1,8 |
| Vocational and educational counselors | 1,930 | 0.1 | 3,750 | 0.2 | 1,8 |
| Managers, Officials and Proprietors, except Farm | 141,640 | 8.9 | 202,060 | 10.2 | 60,4 |
| Buyers, Sales and Loan Managers | 25,980 | 1.6 | 38,510 | 1.9 | 12,5 |
| Bank and financial managers | 7,410 | 0.5 | 11,920 | 0.6 | 4,5 |
| Creditmen | 1,550 | 0.1 | 2,080 | 0.1 | 5 |
| Buyers and shippers, farm products | 210 | * | 230 | * | |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| ntertainers | 10,970 | 0.7 | 14,910 | 0.8 | 3,940 | 36 |
| | 70 | * | 70 | * | - | -1 |
| ed workers | 890 | 0.1 | 1,290 | 0.1 | 400 | 45 |
| | 210 | * | 230 | * | 20 | 8 |
| | 90 | * | 130 | * | 40 | 39 |
| | 1,190 | 0.1 | 1,660 | 0.1 | 470 | 39 |
| ers | 1,880 | 0.1 | 2,690 | 0.1 | 810 | 43 |
| posers | 1,430 | 0.1 | 1,860 | 0.1 | 430 | 30 |
| ptors | 1,530 | 0.1 | 1,910 | 0.1 | 380 | 25 |
| | 1,100 | 0.1 | 1,470 | 0.1 | 370 | 34 |
| en and publicity writers | 1,230 | 0.1 | 1,770 | 0.1 | 540 | 44 |
| ion announcers | 640 | * | 740 | * | 100 | 16 |
| d entertainers, n.e.c. | 710 | * | 1,090 | 0.1 | 380 | 54 |
| echnical and Kindred Workers | 47,040 | 3.0 | 66,270 | 3.3 | 19,230 | 41 |
| | 13,900 | 0.9 | 17,910 | 0.9 | 4,010 | 29 |
| | 1,070 | 0.1 | 1,660 | 0.1 | 590 | 55 |
| ators | 70 | * | 90 | * | 20 | 26 |
| | 5,700 | 0.4 | 7,640 | 0.4 | 1,940 | 34 |
| , except clergymen | 720 | 0.1 | 970 | 0.1 | 250 | 34 |
| advisors | 300 | * | 260 | * | -40 | -14 |
| servationists | 1,870 | 0.1 | 2,450 | 0.1 | 580 | 31 |
| advisors | 190 | * | 180 | * | -10 | -7 |
| | 250 | * | 300 | * | 50 | 19 |
| | 4,100 | 0.3 | 5,490 | 0.3 | 1,390 | 34 |
| | 2,660 | 0.2 | 3,640 | 0.2 | 980 | 37 |
| tem researchers and analysts | 1,270 | 0.1 | 1,960 | 0.1 | 710 | 56 |
| r relations workers | 6,180 | 0.4 | 9,780 | 0.5 | 3,600 | 58 |
| n.e.c. | 1,870 | 0.1 | 2,820 | 0.1 | 950 | 51 |
| | 980 | 0.1 | 1,500 | 0.1 | 520 | 53 |
| | 3,980 | 0.3 | 5,850 | 0.3 | 1,870 | 47 |
| cational counselors | 1,930 | 0.1 | 3,750 | 0.2 | 1,820 | 94 |
| Proprietors, except Farm | 141,640 | 8.9 | 202,060 | 10.2 | 60,420 | 43 |
| n Managers | 25,980 | 1.6 | 38,510 | 1.9 | 12,530 | 48 |
| managers | 7,410 | 0.5 | 11,920 | 0.6 | 4,510 | 61 |
| | 1,550 | 0.1 | 2,080 | 0.1 | 530 | 34 |
| s, farm products | 210 | * | 230 | * | 20 | 9 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment | | Projected 1980 Requirements | |
|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ |
| Buyers, wholesale and retail trade | 2,930 | 0.2 | 4,230 | 0.2 |
| Purchasing agents and buyers, n.e.c. | 2,900 | 0.2 | 3,760 | 0.2 |
| Sales managers and department heads, retail trade | 4,340 | 0.3 | 6,510 | 0.3 |
| Sales managers, except retail trade | 6,640 | 0.4 | 9,780 | 0.5 |
| Administrators and Inspectors; public administration | 14,920 | 0.9 | 19,570 | 1.0 |
| Assessors, controllers and treasurers; local public administration | 500 | * | 760 | * |
| Construction inspectors; public administration | 380 | * | 540 | * |
| Health administrators | 1,460 | 0.1 | 2,340 | 0.1 |
| Inspectors, except construction; public administration | 1,980 | 0.1 | 2,670 | 0.1 |
| Officials and administrators; public administration, n.e.c. | 5,870 | 0.4 | 6,560 | 0.3 |
| Postmasters and mail superintendents | 580 | * | 510 | * |
| School administrators, college | 730 | 0.1 | 1,260 | 0.1 |
| School administrators, elementary and secondary | 3,420 | 0.2 | 4,930 | 0.3 |
| Other Managers, Officials and Proprietors | 100,740 | 6.3 | 143,980 | 7.2 |
| Funeral directors | 960 | 0.1 | 1,210 | 0.1 |
| Managers and superintendents, building | 1,510 | 0.1 | 2,130 | 0.1 |
| Office managers, n.e.c. | 4,880 | 0.3 | 7,870 | 0.4 |
| Officers, pilots and pursers; ship | 210 | * | 260 | * |
| Officials of lodges, societies and unions | 860 | 0.1 | 1,120 | 0.1 |
| Railroad conductors | 880 | 0.1 | 1,090 | 0.1 |
| Restaurant, cafeteria and bar managers | 6,910 | 0.4 | 9,140 | 0.5 |
| Other managers and administrators | 84,530 | 5.3 | 121,160 | 6.1 |
| **Sales Workers** | 114,160 | 7.2 | 150,420 | 7.6 |
| Advertising Agents and Salesmen | 1,060 | 0.1 | 1,550 | 0.1 |
| Auctioneers | 70 | * | 80 | * |
| Demonstrators | 820 | 0.1 | 960 | 0.1 |
| Hucksters and Peddlers | 2,090 | 0.1 | 2,780 | 0.1 |
| Insurance Agents, Brokers and Underwriters | 12,670 | 0.8 | 15,880 | 0.8 |
| Newsboys | 1,010 | 0.1 | 980 | 0.1 |
| Real Estate Agents and Brokers | 5,320 | 0.3 | 6,430 | 0.3 |
| Stock and Bond Salesmen | 1,410 | 0.1 | 2,390 | 0.1 |
| Sales Representatives, manufacturing industries | 10,060 | 0.6 | 13,670 | 0.7 |
| Sales Representatives, wholesale trade | 15,750 | 1.0 | 22,560 | 1.1 |
| Sales Clerks, retail trade | 48,350 | 3.1 | 63,000 | 3.2 |
| Salesmen, retail trade | 10,730 | 0.7 | 13,430 | 0.7 |
| Salesmen of Services and Construction | 4,820 | 0.3 | 6,710 | 0.3 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| olesale and retail trade | 2,930 | 0.2 | 4,230 | 0.2 | 1,300 | 45 |
| agents and buyers, n.e.c. | 2,900 | 0.2 | 3,760 | 0.2 | 860 | 29 |
| gers and department heads, retail trade | 4,340 | 0.3 | 6,510 | 0.3 | 2,170 | 50 |
| gers, except retail trade | 6,640 | 0.4 | 9,780 | 0.5 | 3,140 | 47 |
| and Inspectors; public administration | 14,920 | 0.9 | 19,570 | 1.0 | 4,650 | 31 |
| controllers and treasurers; local public administration | 500 | * | 760 | * | 260 | 54 |
| n inspectors; public administration | 380 | * | 540 | * | 160 | 43 |
| inistrators | 1,460 | 0.1 | 2,340 | 0.1 | 880 | 60 |
| except construction; public administration | 1,980 | 0.1 | 2,670 | 0.1 | 690 | 35 |
| nd administrators; public administration, n.e.c. | 5,870 | 0.4 | 6,560 | 0.3 | 690 | 12 |
| s and mail superintendents | 580 | * | 510 | * | -70 | -13 |
| inistrators, college | 730 | 0.1 | 1,260 | 0.1 | 530 | 73 |
| inistrators, elementary and secondary | 3,420 | 0.2 | 4,930 | 0.3 | 1,510 | 44 |
| s, Officials and Proprietors | 100,740 | 6.3 | 143,980 | 7.2 | 43,240 | 43 |
| ectors | 960 | 0.1 | 1,210 | 0.1 | 250 | 26 |
| nd superintendents, building | 1,510 | 0.1 | 2,130 | 0.1 | 620 | 41 |
| gers, n.e.c. | 4,880 | 0.3 | 7,870 | 0.4 | 2,990 | 61 |
| lots and pursers; ship | 210 | * | 260 | * | 50 | 22 |
| lodges, societies and unions | 860 | 0.1 | 1,120 | 0.1 | 260 | 31 |
| nductors | 880 | 0.1 | 1,090 | 0.1 | 210 | 24 |
| cafeteria and bar managers | 6,910 | 0.4 | 9,140 | 0.5 | 2,230 | 32 |
| gers and administrators | 84,530 | 5.3 | 121,160 | 6.1 | 36,630 | 43 |
| | 114,160 | 7.2 | 150,420 | 7.6 | 36,260 | 32 |
| ents and Salesmen | 1,060 | 0.1 | 1,550 | 0.1 | 490 | 46 |
| | 70 | * | 80 | * | 10 | 20 |
| | 820 | 0.1 | 960 | 0.1 | 140 | 18 |
| Peddlers | 2,090 | 0.1 | 2,780 | 0.1 | 690 | 33 |
| ts, Brokers and Underwriters | 12,670 | 0.8 | 15,880 | 0.8 | 3,210 | 25 |
| | 1,010 | 0.1 | 980 | 0.1 | -30 | -3 |
| ents and Brokers | 5,320 | 0.3 | 6,430 | 0.3 | 1,110 | 21 |
| Salesmen | 1,410 | 0.1 | 2,390 | 0.1 | 980 | 70 |
| tatives, manufacturing industries | 10,060 | 0.6 | 13,670 | 0.7 | 3,610 | 36 |
| tatives, wholesale trade | 15,750 | 1.0 | 22,560 | 1.1 | 6,810 | 43 |
| etail trade | 48,350 | 3.1 | 63,000 | 3.2 | 14,650 | 30 |
| l trade | 10,730 | 0.7 | 13,430 | 0.7 | 2,700 | 25 |
| rvices and Construction | 4,820 | 0.3 | 6,710 | 0.3 | 1,890 | 39 |

### TABLE 3 - continued

### GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Requirements Number 1/ | Projected 1980 Requirements Percent 2/ |
|---|---|---|---|---|
| **Clerical and Kindred Workers** | 249,750 | 15.7 | 330,410 | 16.6 |
| Stenographers, Typists and Secretaries | 73,580 | 4.6 | 104,290 | 5.3 |
| Secretaries, legal | 1,060 | 0.1 | 1,630 | 0.1 |
| Secretaries, medical | 1,030 | 0.1 | 1,750 | 0.1 |
| Secretaries, other | 52,560 | 3.3 | 77,720 | 3.9 |
| Stenographers | 2,560 | 0.2 | 1,860 | 0.1 |
| Typists | 16,370 | 1.0 | 21,330 | 1.1 |
| Office Machine Operators | 10,080 | 0.6 | 11,080 | 0.6 |
| Bookkeeping and billing machine | 970 | 0.1 | 1,250 | 0.1 |
| Calculating machine | 500 | * | 560 | * |
| Computer and peripheral equipment | 2,030 | 0.1 | 3,260 | 0.2 |
| Duplicating machine | 260 | * | 350 | * |
| Keypunch | 5,710 | 0.4 | 4,870 | 0.3 |
| Tabulating machine | 110 | * | 50 | * |
| Other office machine operators | 500 | * | 740 | * |
| Other Clerical Workers | 166,090 | 10.5 | 215,040 | 10.8 |
| Bank tellers | 4,640 | 0.3 | 6,920 | 0.4 |
| Billing clerks | 2,320 | 0.2 | 3,820 | 0.2 |
| Bookkeepers | 32,260 | 2.0 | 40,450 | 2.0 |
| Cashiers | 17,440 | 1.1 | 23,150 | 1.2 |
| Clerical assistants, social welfare | 30 | * | 50 | * |
| Clerical supervisors, n.e.c. | 2,880 | 0.2 | 3,680 | 0.2 |
| Collectors, bill and account | 1,460 | 0.1 | 2,150 | 0.1 |
| Counter clerks, except food | 5,270 | 0.3 | 8,010 | 0.4 |
| Dispatchers and starters, vehicle | 1,110 | 0.1 | 1,540 | 0.1 |
| Enumerators and interviewers | 1,940 | 0.1 | 1,660 | 0.1 |
| Estimators and investigators, n.e.c. | 5,170 | 0.3 | 7,240 | 0.4 |
| Expediters and production controllers | 3,720 | 0.2 | 4,330 | 0.2 |
| File clerks | 6,380 | 0.4 | 7,620 | 0.4 |
| Insurance adjustors, examiners and investigators | 1,620 | 0.1 | 2,080 | 0.1 |
| Library attendants and assistants | 2,010 | 0.1 | 2,720 | 0.1 |
| Mail carriers, post office | 4,870 | 0.3 | 5,070 | 0.3 |
| Mail handlers, except post office | 2,460 | 0.2 | 3,320 | 0.2 |
| Messengers and office boys | 510 | * | 500 | * |
| Meter readers, utilities | 880 | 0.1 | 1,050 | 0.1 |
| Payroll and timekeeping clerks | 3,320 | 0.2 | 4,530 | 0.2 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| **ed Workers** | **249,750** | **15.7** | **330,410** | **16.6** | **80,660** | **32** |
| Typists and Secretaries | 73,580 | 4.6 | 104,290 | 5.3 | 30,710 | 42 |
| legal | 1,060 | 0.1 | 1,630 | 0.1 | 570 | 53 |
| medical | 1,030 | 0.1 | 1,750 | 0.1 | 720 | 70 |
| other | 52,560 | 3.3 | 77,720 | 3.9 | 25,160 | 48 |
| rs | 2,560 | 0.2 | 1,860 | 0.1 | -700 | -27 |
| | 16,370 | 1.0 | 21,330 | 1.1 | 4,960 | 30 |
| Operators | 10,080 | 0.6 | 11,080 | 0.6 | 1,000 | 10 |
| and billing machine | 970 | 0.1 | 1,250 | 0.1 | 280 | 30 |
| machine | 500 | * | 560 | * | 60 | 12 |
| d peripheral equipment | 2,030 | 0.1 | 3,260 | 0.2 | 1,230 | 60 |
| machine | 260 | * | 350 | * | 90 | 33 |
| | 5,710 | 0.4 | 4,870 | 0.3 | -840 | -15 |
| achine | 110 | * | 50 | * | -60 | -53 |
| machine operators | 500 | * | 740 | * | 240 | 47 |
| orkers | 166,090 | 10.5 | 215,040 | 10.8 | 48,950 | 29 |
| | 4,640 | 0.3 | 6,920 | 0.4 | 2,280 | 49 |
| s | 2,320 | 0.2 | 3,820 | 0.2 | 1,500 | 65 |
| | 32,260 | 2.0 | 40,450 | 2.0 | 8,190 | 25 |
| | 17,440 | 1.1 | 23,150 | 1.2 | 5,710 | 33 |
| istants, social welfare | 30 | * | 50 | * | 20 | 62 |
| rvisors, n.e.c. | 2,880 | 0.2 | 3,680 | 0.2 | 800 | 28 |
| ill and account | 1,460 | 0.1 | 2,150 | 0.1 | 690 | 47 |
| s, except food | 5,270 | 0.3 | 8,010 | 0.4 | 2,740 | 52 |
| nd starters, vehicle | 1,110 | 0.1 | 1,540 | 0.1 | 430 | 39 |
| and interviewers | 1,940 | 0.1 | 1,660 | 0.1 | -280 | -14 |
| nd investigators, n.e.c. | 5,170 | 0.3 | 7,240 | 0.4 | 2,070 | 40 |
| nd production controllers | 3,720 | 0.2 | 4,330 | 0.2 | 610 | 16 |
| | 6,380 | 0.4 | 7,620 | 0.4 | 1,240 | 19 |
| justors, examiners and investigators | 1,620 | 0.1 | 2,080 | 0.1 | 460 | 28 |
| dants and assistants | 2,010 | 0.1 | 2,720 | 0.1 | 710 | 35 |
| post office | 4,870 | 0.3 | 5,070 | 0.3 | 200 | 4 |
| , except post office | 2,460 | 0.2 | 3,320 | 0.2 | 860 | 35 |
| nd office boys | 510 | * | 500 | * | -10 | -1 |
| , utilities | 880 | 0.1 | 1,050 | 0.1 | 170 | 19 |
| imekeeping c[illegible] | 3,320 | 0.2 | 4,530 | 0.2 | 1,210 | 36 |

# TABLE 3 - continued
# GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment | | Projected 1980 Requirements | | 19 |
|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolu |
| Postal clerks | 5,350 | 0.3 | 5,320 | 0.3 | - |
| Proofreaders | 390 | * | 620 | * | 2 |
| Real estate appraisers | 390 | * | 560 | * | 1 |
| Receptionists | 5,070 | 0.3 | 6,800 | 0.3 | 1,7 |
| Shipping and receiving clerks | 12,050 | 0.8 | 15,070 | 0.8 | 3,0 |
| Statistical clerks | 4,740 | 0.3 | 5,790 | 0.3 | 1,0 |
| Stock clers and storekeepers | 11,960 | 0.8 | 14,990 | 0.8 | 3,0 |
| Teacher aides, except school monitors | 1,980 | 0.1 | 4,310 | 0.2 | 2,3 |
| Telegraph messengers | 20 | * | 10 | * | - |
| Telegraph operators | 260 | * | 220 | * | - |
| Telephone operators | 8,950 | 0.6 | 10,340 | 0.5 | 1,3 |
| Ticket, station and express agents | 3,380 | 0.2 | 4,400 | 0.2 | 1,0 |
| Weighers | 1,300 | 0.1 | 1,380 | 0.1 | |
| Miscellaneous clerical workers, n.e.c. | 9,960 | 0.6 | 15,340 | 0.8 | 5,3 |
| **Craftsmen, Foremen and Kindred Workers** | 225,650 | 14.2 | 288,150 | 14.5 | 62,5 |
| Construction Craftsmen | 70,530 | 4.4 | 96,940 | 4.9 | 26,4 |
| Brickmasons and stonemasons | 6,210 | 0.4 | 8,840 | 0.4 | 2, |
| Brickmason and stonemason apprentices | 80 | * | 90 | * | |
| Bulldozer operators | 3,360 | 0.2 | 4,490 | 0.2 | 1, |
| Carpenters | 22,490 | 1.4 | 30,060 | 1.5 | 7, |
| Carpenter apprentices | 100 | * | 150 | * | |
| Cement and concrete finishers | 1,700 | 0.1 | 2,870 | 0.1 | 1, |
| Electricians | 10,010 | 0.6 | 14,410 | 0.7 | 4, |
| Electrician apprentices | 320 | * | 490 | * | |
| Excavating, grading and road machine operators, except bulldozer | 5,200 | 0.3 | 7,110 | 0.4 | 1, |
| Floor layers, except tile setters | 700 | * | 1,020 | 0.1 | |
| Painters, construction and maintenance | 8,530 | 0.5 | 9.820 | 0.5 | 1, |
| Painter apprentices | 20 | * | 30 | * | |
| Paperhangers | 230 | * | 340 | * | |
| Plasterers | 320 | * | 400 | * | |
| Plasterer apprentices | 10 | * | - | * | |
| Plumbers and pipefitters | 7,050 | 0.4 | 10,250 | 0.5 | 3, |
| Plumber and pipefitter apprentices | 240 | * | 360 | * | |
| Roofers and slaters | 1,690 | 0.1 | 2,940 | 0.2 | 1, |
| Structural metal craftsmen | 1,240 | 0.1 | 1,940 | 0.1 | |
| Tile setters | 1,030 | 0.1 | 1,330 | 0.1 | |

## TABLE 3 - continued

## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

|  | 1970 Employment |  | Projected 1980 Requirements |  | Change, 1970 – 1980 |  |
|---|---|---|---|---|---|---|
|  | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
|  | 5,350 | 0.3 | 5,320 | 0.3 | -30 | -1 |
|  | 390 | * | 620 | * | 230 | 58 |
| isers | 390 | * | 560 | * | 170 | 46 |
|  | 5,070 | 0.3 | 6,800 | 0.3 | 1,730 | 34 |
| eiving clerks | 12,050 | 0.8 | 15,070 | 0.8 | 3,020 | 25 |
|  | 4,740 | 0.3 | 5,790 | 0.3 | 1,050 | 22 |
| torekeepers | 11,960 | 0.8 | 14,990 | 0.8 | 3,030 | 25 |
| xcept school monitors | 1,980 | 0.1 | 4,310 | 0.2 | 2,330 | 117 |
| ngers | 20 | * | 10 | * | -10 | -57 |
| ors | 260 | * | 220 | * | -40 | -15 |
| tors | 8,950 | 0.6 | 10,340 | 0.5 | 1,390 | 16 |
| nd express agents | 3,380 | 0.2 | 4,400 | 0.2 | 1,020 | 30 |
|  | 1,300 | 0.1 | 1,380 | 0.1 | 80 | 7 |
| erical workers, n.e.c. | 9,960 | 0.6 | 15,340 | 0.8 | 5,380 | 54 |
| **d Kindred Workers** | **225,650** | **14.2** | **288,150** | **14.5** | **62,500** | **28** |
| nen | 70,530 | 4.4 | 96,940 | 4.9 | 26,410 | 37 |
| stonemasons | 6,210 | 0.4 | 8,840 | 0.4 | 2,630 | 42 |
| tonemason apprentices | 80 | * | 90 | * | 10 | 15 |
| rs | 3,360 | 0.2 | 4,490 | 0.2 | 1,130 | 34 |
|  | 22,490 | 1.4 | 30,060 | 1.5 | 7,570 | 34 |
| tices | 100 | * | 150 | * | 50 | 51 |
| ete finishers | 1,700 | 0.1 | 2,870 | 0.1 | 1,170 | 69 |
|  | 10,010 | 0.6 | 14,410 | 0.7 | 4,400 | 44 |
| ntices | 320 | * | 490 | * | 170 | 55 |
| ing and road machine operators, except bulldozer | 5,200 | 0.3 | 7,110 | 0.4 | 1,910 | 37 |
| ept tile setters | 700 | * | 1,020 | 0.1 | 320 | 46 |
| ction and maintenance | 8,530 | 0.5 | 9.820 | 0.5 | 1,290 | 15 |
| es | 20 | * | 30 | * | 10 | 13 |
|  | 230 | * | 340 | * | 110 | 50 |
|  | 320 | * | 400 | * | 80 | 24 |
| ices | 10 | * | - | * | -10 | -20 |
| efitters | 7,050 | 0.4 | 10,250 | 0.5 | 3,200 | 45 |
| fitter apprentices | 240 | * | 360 | * | 120 | 51 |
| rs | 1,690 | 0.1 | 2,940 | 0.2 | 1,250 | 74 |
| raftsmen | 1,240 | 0.1 | 1,940 | 0.1 | 700 | 57 |
|  | 1,030 | 0.1 | 1,330 | 0.1 | 300 | 29 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment<br>Number 1/ | <br>Percent 2/ | Projected 1980 Requirements<br>Number 1/ | <br>Percent 2/ | <br>Abso |
|---|---|---|---|---|---|
| Foremen, n.e.c. | 37,740 | 2.4 | 47,180 | 2.4 | 9, |
| Metalworking Craftsmen, except Mechanics | 13,520 | 0.9 | 16,430 | 0.8 | 2, |
| Blacksmiths | 150 | * | 160 | * | |
| Boilermakers | 640 | * | 920 | 0.1 | |
| Heat treaters, annealers and temperers | 60 | * | 60 | * | |
| Forgemen and hammermen | 120 | * | 150 | * | |
| Job and die setters, metal | 260 | * | 370 | * | |
| Machinists | 5,770 | 0.4 | 7,080 | 0.4 | 1, |
| Machinist apprentices | 100 | * | 110 | * | |
| Millwrights | 760 | 0.1 | 950 | 0.1 | |
| Molders, metal | 520 | * | 660 | * | |
| Molder apprentices | 10 | * | 10 | * | |
| Pattern and model makers, except paper | 330 | * | 340 | * | |
| Rollers and finishers, metal | 170 | * | 260 | * | |
| Sheetmetal workers and tinsmiths | 3,060 | 0.2 | 3,520 | 0.2 | |
| Sheetmetal worker apprentices | 100 | * | 160 | * | |
| Tool and die makers | 1,440 | 0.1 | 1,640 | 0.1 | |
| Tool and die maker apprentices | 30 | * | 40 | * | |
| Mechanics, Repairmen and Installers | 63,760 | 4.0 | 77,820 | 3.9 | 14, |
| Air conditioning, heating and refrigeration | 3,410 | 0.2 | 6,210 | 0.3 | 2 |
| Aircraft | 7,300 | 0.5 | 8,820 | 0.4 | 1 |
| Automobile accessories installers | 250 | * | 230 | * | |
| Automobile body repairmen | 2,500 | 0.2 | 2,430 | 0.1 | |
| Automobile mechanics | 20,440 | 1.3 | 22,330 | 1.1 | 1 |
| Automobile mechanic apprentices | 40 | * | 50 | * | |
| Data processing machine repairmen | 600 | * | 1,110 | 0.1 | |
| Farm implement | 490 | * | 600 | * | |
| Heavy equipment mechanics, including diesel | 14,600 | 0.9 | 19,350 | 1.0 | 4 |
| Household appliance mechanics | 2,990 | 0.2 | 4,240 | 0.2 | 1 |
| Loom fixers | 2,250 | 0.1 | 2,240 | 0.1 | |
| Office machine repairmen | 800 | 0.1 | 1,070 | 0.1 | |
| Radio and television repairmen | 3,460 | 0.2 | 3,760 | 0.2 | |
| Railroad and car shop repairmen | 1,140 | 0.1 | 1,300 | 0.1 | |
| Mechanic, except automobile, apprentices | 140 | * | 210 | * | |
| Other mechanics and repairmen | 3,350 | 0.2 | 3,870 | 0.2 | |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| | 37,740 | 2.4 | 47,180 | 2.4 | 9,440 | 25 |
| aftsmen, except Mechanics | 13,520 | 0.9 | 16,430 | 0.8 | 2,910 | 22 |
| | 150 | * | 160 | * | 10 | 3 |
| | 640 | * | 920 | 0.1 | 280 | 44 |
| , annealers and temperers | 60 | * | 60 | * | - | -5 |
| l hammermen | 120 | * | 150 | * | 30 | 29 |
| etters, metal | 260 | * | 370 | * | 110 | 43 |
| | 5,770 | 0.4 | 7,080 | 0.4 | 1,310 | 23 |
| rentices | 100 | * | 110 | * | 10 | 7 |
| | 760 | 0.1 | 950 | 0.1 | 190 | 26 |
| l | 520 | * | 660 | * | 140 | 26 |
| tices | 10 | * | 10 | * | - | 29 |
| odel makers, except paper | 330 | * | 340 | * | 10 | 3 |
| nishers, metal | 170 | * | 260 | * | 90 | 50 |
| orkers and tinsmiths | 3,060 | 0.2 | 3,520 | 0.2 | 460 | 15 |
| orker apprentices | 100 | * | 160 | * | 60 | 60 |
| makers | 1,440 | 0.1 | 1,640 | 0.1 | 200 | 14 |
| maker apprentices | 30 | * | 40 | * | 10 | 38 |
| irmen and Installers | 63,760 | 4.0 | 77,820 | 3.9 | 14,060 | 22 |
| ng, heating and refrigeration | 3,410 | 0.2 | 6,210 | 0.3 | 2,800 | 82 |
| | 7,300 | 0.5 | 8,820 | 0.4 | 1,520 | 21 |
| ccessories installers | 250 | * | 230 | * | -20 | -9 |
| ody repairmen | 2,500 | 0.2 | 2,430 | 0.1 | -70 | -2 |
| echanics | 20,440 | 1.3 | 22,330 | 1.1 | 1,890 | 9 |
| echanic apprentices | 40 | * | 50 | * | 10 | 21 |
| ing machine repairmen | 600 | * | 1,110 | 0.1 | 510 | 84 |
| ent | 490 | * | 600 | * | 110 | 21 |
| ent mechanics, including diesel | 14,600 | 0.9 | 19,350 | 1.0 | 4,750 | 33 |
| pliance mechanics | 2,990 | 0.2 | 4,240 | 0.2 | 1,250 | 42 |
| | 2,250 | 0.1 | 2,240 | 0.1 | -10 | - |
| e repairmen | 800 | 0.1 | 1,070 | 0.1 | 270 | 34 |
| evision repairmen | 3,460 | 0.2 | 3,760 | 0.2 | 300 | 9 |
| car shop repairmen | 1,140 | 0.1 | 1,300 | 0.1 | 160 | 15 |
| cept automobile, apprentices | 140 | * | 210 | * | 70 | 51 |
| ics and repairmen | 3,350 | 0.2 | 3,870 | 0.2 | 520 | 16 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment | | Projected 1980 Requirements | | 1 |
|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absol |
| Printing Trade Craftsmen | 6,500 | 0.4 | 8,070 | 0.4 | 1,5 |
| Bookbinders | 480 | * | 570 | * | |
| Compositors and typesetters | 2,750 | 0.2 | 3,250 | 0.2 | 5 |
| Electrotypers and stereotypers | 70 | * | 70 | * | |
| Engravers, except photoengravers | 150 | * | 170 | * | |
| Photoengravers and lithographers | 400 | * | 600 | * | 2 |
| Pressmen and plate printers | 2,510 | 0.2 | 3,230 | 0.2 | 7 |
| Pressman apprentices | 80 | * | 130 | * | |
| Printing trade apprentices, except pressman | 60 | * | 50 | * | |
| Transportation and Public Utility Craftsmen | 11,020 | 0.7 | 14,550 | 0.7 | 3, |
| Electric power linemen and cablemen | 2,330 | 0.2 | 3,030 | 0.2 | |
| Locomotive engineers | 1,090 | 0.1 | 1,360 | 0.1 | |
| Locomotive firemen | 140 | * | 120 | * | |
| Power station operators | 340 | * | 360 | * | |
| Telephone installers and repairmen | 5,820 | 0.4 | 8,160 | 0.4 | 2, |
| Telephone linemen and splicers | 1,300 | 0.1 | 1,520 | 0.1 | |
| Other Craftsmen and Kindred Workers | 22,580 | 1.4 | 27,160 | 1.4 | 4, |
| Bakers | 1,600 | 0.1 | 1,830 | 0.1 | |
| Cabinetmakers | 1,990 | 0.1 | 2,290 | 0.1 | |
| Carpet installers | 1,130 | 0.1 | 1,570 | 0,1 | |
| Cranemen, derrickmen and hoistmen | 2,260 | 0.1 | 3,090 | 0.2 | |
| Decorators and window dressers | 1,650 | 0.1 | 1,970 | 0.1 | |
| Dental laboratory technicians | 450 | * | 520 | * | |
| Furniture and wood finishers | 420 | * | 430 | * | |
| Furriers | 20 | * | 10 | * | |
| Glaziers | 630 | * | 930 | 0.1 | |
| Inspectors, scalers and graders; log and lumber | 540 | * | 630 | * | |
| Inspectors, n.e.c. | 1,890 | 0.1 | 2,460 | 0.1 | |
| Jewelers and watchmakers | 660 | * | 780 | * | |
| Millers, grain, flour and feed | 170 | * | 180 | * | |
| Motion picture projectionists | 310 | * | 260 | * | |
| Opticians and lens grinders and polishers | 330 | * | 530 | * | |
| Piano and organ tuners and repairmen | 150 | * | 150 | * | |
| Shipfitters | 40 | * | 30 | * | |
| Shoe repairmen | 590 | * | 560 | * | |
| Sign painters and letterers | 390 | * | 390 | * | |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number [1] | Percent [2] | Number [1] | Percent [2] | Absolute | Percent [2] |
| smen | 6,500 | 0.4 | 8,070 | 0.4 | 1,570 | 24 |
| | 480 | * | 570 | * | 90 | 20 |
| typesetters | 2,750 | 0.2 | 3,250 | 0.2 | 500 | 18 |
| stereotypers | 70 | * | 70 | * | - | 5 |
| photoengravers | 150 | * | 170 | * | 20 | 14 |
| nd lithographers | 400 | * | 600 | * | 200 | 49 |
| te printers | 2,510 | 0.2 | 3,230 | 0.2 | 720 | 29 |
| tices | 80 | * | 130 | * | 50 | 57 |
| prentices, except pressman | 60 | * | 50 | * | -10 | -27 |
| Public Utility Craftsmen | 11,020 | 0.7 | 14,550 | 0.7 | 3,530 | 32 |
| nemen and cablemen | 2,330 | 0.2 | 3,030 | 0.2 | 700 | 30 |
| neers | 1,090 | 0.1 | 1,360 | 0.1 | 270 | 25 |
| en | 140 | * | 120 | * | -20 | -17 |
| erators | 340 | * | 360 | * | 20 | 5 |
| lers and repairmen | 5,820 | 0.4 | 8,160 | 0.4 | 2,340 | 40 |
| n and splicers | 1,300 | 0.1 | 1,520 | 0.1 | 220 | 17 |
| Kindred Workers | 22,580 | 1.4 | 27,160 | 1.4 | 4,580 | 20 |
| | 1,600 | 0.1 | 1,830 | 0.1 | 230 | 14 |
| | 1,990 | 0.1 | 2,290 | 0.1 | 300 | 15 |
| | 1,130 | 0.1 | 1,570 | 0.1 | 440 | 39 |
| kmen and hoistmen | 2,260 | 0.1 | 3,090 | 0.2 | 830 | 37 |
| indow dressers | 1,650 | 0.1 | 1,970 | 0.1 | 320 | 20 |
| technicians | 450 | * | 520 | * | 70 | 16 |
| od finishers | 420 | * | 430 | * | 10 | 2 |
| | 20 | * | 10 | * | -10 | -31 |
| | 630 | * | 930 | 0.1 | 300 | 48 |
| rs and graders; log and lumber | 540 | * | 630 | * | 90 | 18 |
| | 1,890 | 0.1 | 2,460 | 0.1 | 570 | 30 |
| chmakers | 660 | * | 780 | * | 120 | 18 |
| ur and feed | 170 | * | 180 | * | 10 | 8 |
| ojectionists | 310 | * | 260 | * | -50 | -16 |
| s grinders and polishers | 330 | * | 530 | * | 200 | 58 |
| tuners and repairmen | 150 | * | 150 | * | - | 1 |
| | 40 | * | 30 | * | -10 | -25 |
| | 590 | * | 560 | * | -30 | -6 |
| letterers | 390 | * | 390 | * | - | 2 |

# TABLE 3
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Requirements Number 1/ | Projected 1980 Requirements Percent 2/ |
|---|---|---|---|---|
| Stationary engineers | 2,390 | 0.2 | 2,810 | 0.1 |
| Stone cutters and stone carvers | 440 | * | 490 | * |
| Tailors | 1,630 | 0.1 | 1,840 | 0.1 |
| Upholsterers | 1,520 | 0.1 | 1,790 | 0.1 |
| Craftsmen and kindred workers, n.e.c. | 1,200 | 0.1 | 1,390 | 0.1 |
| Craftsman apprentices, n.e.c. | 180 | * | 230 | * |
| **Operatives and Kindred Workers** | 323,290 | 20.4 | 376,720 | 19.0 |
| Operatives, except Transport | 255,600 | 16.1 | 293,480 | 14.8 |
| Semiskilled metalworking | 14,960 | 0.9 | 20,930 | 1.1 |
| Drill press operatives | 480 | * | 520 | * |
| Furnacemen, smeltermen and pourers | 490 | * | 740 | * |
| Grinding machine operatives | 690 | * | 840 | * |
| Heaters, metal | 40 | * | 40 | * |
| Lathe and milling machine operatives | 800 | 0.1 | 870 | * |
| Metal platers | 250 | * | 320 | * |
| Precision machine operatives, n.e.c. | 560 | * | 690 | * |
| Punch and stamping press operatives | 1,330 | 0.1 | 1,700 | 0.1 |
| Solderers | 90 | * | 60 | * |
| Welders and flame cutters | 10,230 | 0.6 | 15,150 | 0.8 |
| Semiskilled textile | 48,420 | 3.1 | 47,070 | 2.4 |
| Carding, lapping and combing operatives | 2,400 | 0.2 | 1,750 | 0.1 |
| Knitters, loopers and toppers | 870 | 0.1 | 860 | * |
| Spinners, twisters and winders | 20,230 | 1.3 | 20,950 | 1.1 |
| Weavers | 5,620 | 0.4 | 4,680 | 0.2 |
| Textile operatives, n.e.c. | 19,300 | 1.2 | 18,830 | 1.0 |
| Semiskilled packing and inspecting | 34,470 | 2.2 | 44,520 | 2.2 |
| Checkers, examiners and inspectors; manufacturing | 17,120 | 1.1 | 22,460 | 1.1 |
| Graders and sorters, manufacturing | 1,180 | 0.1 | 1,340 | 0.1 |
| Meat wrappers, retail trade | 750 | 0.1 | 1,020 | 0.1 |
| Packers and wrappers, except meat and produce | 14,640 | 0.9 | 18,780 | 0.9 |
| Produce graders and packers, except factory and farm | 780 | 0.1 | 920 | 0.1 |
| Other Operatives, except Transport | 157,750 | 9.9 | 180,960 | 9.1 |
| Asbestos and insulation workers | 550 | * | 770 | * |
| Assemblers | 15,860 | 1.0 | 19,100 | 1.0 |

## TABLE 3
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| eers | 2,390 | 0.2 | 2,810 | 0.1 | 420 | 18 |
| d stone carvers | 440 | * | 490 | * | 50 | 10 |
| | 1,630 | 0.1 | 1,840 | 0.1 | 210 | 13 |
| | 1,520 | 0.1 | 1,790 | 0.1 | 270 | 18 |
| indred workers, n.e.c. | 1,200 | 0.1 | 1,390 | 0.1 | 190 | 16 |
| ntices, n.e.c. | 180 | * | 230 | * | 50 | 28 |
| d Workers | 323,290 | 20.4 | 376,720 | 19.0 | 53,430 | 17 |
| Transport | 255,600 | 16.1 | 293,480 | 14.8 | 37,880 | 15 |
| lworking | 14,960 | 0.9 | 20,930 | 1.1 | 5,970 | 40 |
| eratives | 480 | * | 520 | * | 40 | 9 |
| smeltermen and pourers | 490 | * | 740 | * | 250 | 52 |
| hine operatives | 690 | * | 840 | * | 150 | 22 |
| l | 40 | * | 40 | * | - | 5 |
| lling machine operatives | 800 | 0.1 | 870 | * | 70 | 8 |
| | 250 | * | 320 | * | 70 | 29 |
| chine operatives, n.e.c. | 560 | * | 690 | * | 130 | 23 |
| mping press operatives | 1,330 | 0.1 | 1,700 | 0.1 | 370 | 28 |
| | 90 | * | 60 | * | -30 | -35 |
| lame cutters | 10,230 | 0.6 | 15,150 | 0.8 | 4,920 | 48 |
| le | 48,420 | 3.1 | 47,070 | 2.4 | -1,350 | -3 |
| ing and combing operatives | 2,400 | 0.2 | 1,750 | 0.1 | -650 | -27 |
| ers and toppers | 870 | 0.1 | 860 | * | -10 | -1 |
| ters and winders | 20,230 | 1.3 | 20,950 | 1.1 | 720 | 4 |
| | 5,620 | 0.4 | 4,680 | 0.2 | -940 | -17 |
| tives, n.e.c. | 19,300 | 1.2 | 18,830 | 1.0 | -470 | -2 |
| ing and inspecting | 34,470 | 2.2 | 44,520 | 2.2 | 10,050 | 29 |
| miners and inspectors; manufacturing | 17,120 | 1.1 | 22,460 | 1.1 | 5,340 | 31 |
| orters, manufacturing | 1,180 | 0.1 | 1,340 | 0.1 | 160 | 14 |
| , retail trade | 750 | 0.1 | 1,020 | 0.1 | 270 | 36 |
| rappers, except meat and produce | 14,640 | 0.9 | 18,780 | 0.9 | 4,140 | 28 |
| rs and packers, except factory and farm | 780 | 0.1 | 920 | 0.1 | 140 | 18 |
| cept Transport | 157,750 | 9.9 | 180,960 | 9.1 | 23,210 | 15 |
| ulation workers | 550 | * | 770 | * | 220 | 40 |
| | 15,860 | 1.0 | 19,100 | 1.0 | 3,240 | 20 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment | | Projected 1980 Requirements | | 1 |
|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absol |
| Blasters and powdermen | 70 | * | 80 | * | |
| Bottling and canning operatives | 770 | 0.1 | 910 | 0.1 | 1 |
| Chainmen, rodmen and axmen; surveying | 300 | * | 390 | * | |
| Clothing ironers and pressers | 6,190 | 0.4 | 5,620 | 0.3 | -5 |
| Cutting operatives, n.e.c. | 4,930 | 0.3 | 6,030 | 0.3 | 1,1 |
| Dressmakers and seamstreses, except factory | 2,120 | 0.1 | 2,470 | 0.1 | 3 |
| Drillers, earth | 780 | 0.1 | 890 | * | 1 |
| Drywall installers and lathers | 1,250 | 0.1 | 2,160 | 0.1 | 9 |
| Dyers | 2,110 | 0.1 | 2,730 | 0.1 | 6 |
| Filers, polishers, sanders and buffers | 1,990 | 0.1 | 1,890 | 0.1 | -1 |
| Garage workers and gas station attendants | 10,380 | 0.7 | 11,030 | 0.6 | 6 |
| Laundry and dry cleaning operatives, n.e.c. | 3,650 | 0.2 | 3,940 | 0.2 | 2 |
| Meat cutters and butchers, except manufacturing | 3,900 | 0.3 | 4,020 | 0.2 | 1 |
| Meat cutters and butchers, manufacturing | 2,220 | 0.1 | 2,610 | 0.1 | 3 |
| Milliners | 20 | * | 10 | * | |
| Mine operatives, n.e.c. | 1,910 | 0.1 | 1,650 | 0.1 | -2 |
| Mixing operatives | 1,930 | 0.1 | 2,290 | 0.1 | |
| Oilers and greasers, except auto | 930 | 0.1 | 970 | 0.1 | |
| Painters, manufactured articles | 2,280 | 0.1 | 2,390 | 0.1 | |
| Photographic process workers | 890 | 0.1 | 1,200 | 0.1 | |
| Riveters and fasteners | 530 | * | 550 | * | |
| Sailors and deckhands | 200 | * | 200 | * | |
| Sawyers | 3,680 | 0.2 | 4,600 | 0.2 | |
| Sewers and stitchers | 46,500 | 2.9 | 55,710 | 2.8 | 9, |
| Shoemaking machine operatives | 940 | 0.1 | 640 | * | - |
| Stationary firemen | 1,870 | 0.1 | 1,960 | 0.1 | |
| Winding operatives, n.e.c. | 1,560 | 0.1 | 1,860 | 0.1 | |
| Miscellaneous machine operatives | 20,450 | 1.3 | 24,340 | 1.2 | 3, |
| Operatives, n.e.c. | 16,990 | 1.1 | 17,950 | 0.9 | |
| **Transport Equipment Operatives** | 67,690 | 4.3 | 83,240 | 4.2 | 15, |
| Boatmen and canalmen | 50 | * | 50 | * | |
| Bus drivers | 5,210 | 0.3 | 7,840 | 0.4 | 2, |
| Conductors and motormen, urban rail transit | 50 | * | 60 | * | |
| Deliverymen and routemen | 13,110 | 0.8 | 16,850 | 0.9 | 3, |
| Fork lift and tow motor operatives | 6,230 | 0.4 | 7,840 | 0.4 | 1, |
| Motormen; mine, factory, logging camp, etc. | 50 | * | 70 | * | |
| Parking attendants | 520 | * | 580 | * | |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 - 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| owdermen | 70 | * | 80 | * | 10 | 20 |
| anning operatives | 770 | 0.1 | 910 | 0.1 | 140 | 18 |
| men and axmen; surveying | 300 | * | 390 | * | 90 | 28 |
| rs and pressers | 6,190 | 0.4 | 5,620 | 0.3 | -570 | -9 |
| ives, n.e.c. | 4,930 | 0.3 | 6,030 | 0.3 | 1,100 | 22 |
| nd seamstreses, except factory | 2,120 | 0.1 | 2,470 | 0.1 | 350 | 17 |
| | 780 | 0.1 | 890 | * | 110 | 14 |
| lers and lathers | 1,250 | 0.1 | 2,160 | 0.1 | 910 | 73 |
| | 2,110 | 0.1 | 2,730 | 0.1 | 620 | 29 |
| ers, sanders and buffers | 1,990 | 0.1 | 1,890 | 0.1 | -100 | -5 |
| s and gas station attendants | 10,380 | 0.7 | 11,030 | 0.6 | 650 | 6 |
| ry cleaning operatives, n.e.c. | 3,650 | 0.2 | 3,940 | 0.2 | 290 | 8 |
| nd butchers, except manufacturing | 3,900 | 0.3 | 4,020 | 0.2 | 120 | 3 |
| nd butchers, manufacturing | 2,220 | 0.1 | 2,610 | 0.1 | 390 | 18 |
| | 20 | * | 10 | * | -10 | -44 |
| s, n.e.c. | 1,910 | 0.1 | 1,650 | 0.1 | -260 | -13 |
| ves | 1,930 | 0.1 | 2,290 | 0.1 | 360 | 18 |
| asers, except auto | 930 | 0.1 | 970 | 0.1 | 40 | 5 |
| factured articles | 2,280 | 0.1 | 2,390 | 0.1 | 110 | 5 |
| rocess workers | 890 | 0.1 | 1,200 | 0.1 | 310 | 34 |
| asteners | 530 | * | 550 | * | 20 | 3 |
| ckhands | 200 | * | 200 | * | - | 2 |
| | 3,680 | 0.2 | 4,600 | 0.2 | 920 | 25 |
| tchers | 46,500 | 2.9 | 55,710 | 2.8 | 9,210 | 20 |
| chine operatives | 940 | 0.1 | 640 | * | -300 | -32 |
| men | 1,870 | 0.1 | 1,960 | 0.1 | 90 | 5 |
| ives, n.e.c. | 1,560 | 0.1 | 1,860 | 0.1 | 300 | 19 |
| machine operatives | 20,450 | 1.3 | 24,340 | 1.2 | 3,890 | 19 |
| .c. | 16,990 | 1.1 | 17,950 | 0.9 | 960 | 6 |
| ent Operatives | 67,690 | 4.3 | 83,240 | 4.2 | 15,550 | 23 |
| nalmen | 50 | * | 50 | * | - | 8 |
| | 5,210 | 0.3 | 7,840 | 0.4 | 2,630 | 50 |
| motormen, urban rail transit | 50 | * | 60 | * | 10 | 30 |
| d routemen | 13,110 | 0.8 | 16,850 | 0.9 | 3,740 | 29 |
| w motor operatives | 6,230 | 0.4 | 7,840 | 0.4 | 1,610 | 26 |
| , factory, logging camp, etc. | 50 | * | 70 | * | 20 | 38 |
| nts | 520 | * | 580 | * | 60 | 10 |

TABLE 3 - continued

## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment |  | Projected 1980 Requirements |  | 19 |
|---|---|---|---|---|---|
|  | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolut |
| Railroad brakemen | 770 | 0.1 | 890 | * | 12 |
| Railroad switchmen | 1,390 | 0.1 | 1,640 | 0.1 | 25 |
| Taxicab drivers and chauffeurs | 3,010 | 0.2 | 2,900 | 0.2 | -11 |
| Truck drivers | 37,300 | 2.4 | 44,520 | 2.2 | 7,22 |
| **Service Workers** | 203,380 | 12.8 | 246,600 | 12.4 | 43,22 |
| Cleaning Service Workers | 38,620 | 2.4 | 52,260 | 2.6 | 13,64 |
| Chambermaids and maids, except private household | 6,430 | 0.4 | 9,540 | 0.5 | 3,11 |
| Cleaners and charwomen | 9,530 | 0.6 | 11,160 | 0.6 | 1,63 |
| Janitors and sextons | 22,660 | 1.4 | 31,560 | 1.6 | 3,90 |
| Food Service Workers | 48,230 | 3.0 | 60,000 | 3.0 | 11,77 |
| Bartenders | 1,120 | 0.1 | 1,430 | 0.1 | 31 |
| Busboys | 850 | 0.1 | 970 | 0.1 | 12 |
| Cooks, except private household | 20,240 | 1.3 | 24,980 | 1.3 | 4,74 |
| Dishwashers | 2,300 | 0.1 | 2,960 | 0.2 | 66 |
| Food counter and fountain workers | 2,320 | 0.2 | 2,330 | 0.1 | 1 |
| Waiters | 16,130 | 1.0 | 20,520 | 1.0 | 4,39 |
| Food service workers, n.e.c., except private household | 5,270 | 0.3 | 6,810 | 0.3 | 1,54 |
| Health Service Workers | 21,830 | 1.4 | 31,130 | 1.6 | 9,30 |
| Dental assistants | 1,370 | 0.1 | 2,230 | 0.1 | 8 |
| Health aides, except nursing | 2,030 | 0.1 | 3,610 | 0.2 | 1,50 |
| Health trainees | 480 | * | 130 | * | -3 |
| Lay midwives | 10 | * | 10 | * |  |
| Nursing aides, orderlies and attendants | 13,490 | 0.9 | 18,040 | 0.9 | 4,5 |
| Practical nurses | 4,450 | 0.3 | 7,110 | 0.4 | 2,6 |
| Personal Service Workers | 25,510 | 1.6 | 33,530 | 1.7 | 8,0 |
| Airline stewardesses | 1,460 | 0.1 | 2,470 | 0.1 | 1,0 |
| Attendants, recreation and amusement | 850 | 0.1 | 1,140 | 0.1 | 2 |
| Attendants, personal service, n.e.c. | 740 | 0.1 | 810 | * |  |
| Baggage porters and bellhops | 540 | * | 400 | * | -1 |
| Barbers | 3,760 | 0.2 | 4,050 | 0.2 | 2 |
| Boarding and lodging housekeepers | 180 | * | 40 | * | -1 |
| Bootblacks | 90 | * | 50 | * | - |
| Child care workers, except private household | 3,310 | 0.2 | 4,740 | 0.2 | 1,4 |
| Elevator operators | 380 | * | 220 | * | -1 |

TABLE 3 - continued

## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| | 770 | 0.1 | 890 | * | 120 | 15 |
| n | 1,390 | 0.1 | 1,640 | 0.1 | 250 | 18 |
| d chauffeurs | 3,010 | 0.2 | 2,900 | 0.2 | -110 | -4 |
| | 37,300 | 2.4 | 44,520 | 2.2 | 7,220 | 19 |
| | 203,380 | 12.8 | 246,600 | 12.4 | 43,220 | 21 |
| kers | 38,620 | 2.4 | 52,260 | 2.6 | 13,640 | 35 |
| maids, except private household | 6,430 | 0.4 | 9,540 | 0.5 | 3,110 | 48 |
| women | 9,530 | 0.6 | 11,160 | 0.6 | 1,630 | 17 |
| ns | 22,660 | 1.4 | 31,560 | 1.6 | 8,900 | 39 |
| | 48,230 | 3.0 | 60,000 | 3.0 | 11,770 | 24 |
| | 1,120 | 0.1 | 1,430 | 0.1 | 310 | 28 |
| | 850 | 0.1 | 970 | 0.1 | 120 | 14 |
| ate household | 20,240 | 1.3 | 24,980 | 1.3 | 4,740 | 23 |
| | 2,300 | 0.1 | 2,960 | 0.2 | 660 | 29 |
| ountain workers | 2,320 | 0.2 | 2,330 | 0.1 | 10 | - |
| | 16,130 | 1.0 | 20,520 | 1.0 | 4,390 | 27 |
| ers, n.e.c., except private household | 5,270 | 0.3 | 6,810 | 0.3 | 1,540 | 29 |
| s | 21,830 | 1.4 | 31,130 | 1.6 | 9,300 | 43 |
| | 1,370 | 0.1 | 2,230 | 0.1 | 860 | 63 |
| pt nursing | 2,030 | 0.1 | 3,610 | 0.2 | 1,580 | 78 |
| | 480 | * | 130 | * | -350 | -73 |
| | 10 | * | 10 | * | - | 10 |
| erlies and attendants | 13,490 | 0.9 | 18,040 | 0.9 | 4,550 | 34 |
| | 4,450 | 0.3 | 7,110 | 0.4 | 2,660 | 60 |
| kers | 25,510 | 1.6 | 33,530 | 1.7 | 8,020 | 31 |
| es | 1,460 | 0.1 | 2,470 | 0.1 | 1,010 | 69 |
| tion and amusement | 850 | 0.1 | 1,140 | 0.1 | 290 | 34 |
| al service, n.e.c. | 740 | 0.1 | 810 | * | 70 | 10 |
| nd bellhops | 540 | * | 400 | * | -140 | -26 |
| | 3,760 | 0.2 | 4,050 | 0.2 | 290 | 8 |
| ing housekeepers | 180 | * | 40 | * | -140 | -76 |
| | 90 | * | 50 | * | -40 | -43 |
| , except private household | 3,310 | 0.2 | 4,740 | 0.2 | 1,430 | 43 |
| | 380 | * | 220 | * | -160 | -42 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment Number 1/ | 1970 Employment Percent 2/ | Projected 1980 Requirements Number 1/ | Projected 1980 Requirements Percent 2/ | Absol |
|---|---|---|---|---|---|
| Hairdressers and cosmetologists | 11,140 | 0.7 | 15,040 | 0.8 | 3,9 |
| Housekeepers, except private household | 2,450 | 0.2 | 3,660 | 0.2 | 1,2 |
| Personal service apprentices | 60 | * | 30 | * | |
| School monitors | 60 | * | 110 | * | |
| Ushers, recreation and amusement | 130 | * | 110 | * | |
| Welfare service aides | 360 | * | 660 | * | |
| Protective Service Workers | 18,840 | 1.2 | 27,850 | 1.4 | 9, |
| Crossing guards and bridge tenders | 720 | 0.1 | 1,010 | 0.1 | |
| Firemen, fire protection | 3,430 | 0.2 | 6,130 | 0.3 | 2, |
| Guards and watchmen | 7,070 | 0.5 | 8,160 | 0.4 | 1, |
| Marshals and constables | 140 | * | 220 | * | |
| Policemen and dectives | 6,530 | 0.4 | 10,680 | 0.5 | 4, |
| Sheriffs and bailiffs | 950 | 0.1 | 1,650 | 0.1 | |
| Private Household Workers | 50,350 | 3.2 | 41,830 | 2.1 | -8, |
| Child care workers | 4,510 | 0.3 | 3,770 | 0.2 | |
| Cooks, private household | 1,910 | 0.1 | 1,700 | 0.1 | |
| Housekeepers, private household | 2,750 | 0.2 | 2,360 | 0.1 | |
| Laundresses, private household | 480 | * | 320 | * | |
| Maids and servants, private household | 40,700 | 2.6 | 33,680 | 1.7 | -7, |
| Laborers, except Farm | 72,350 | 4.6 | 84,650 | 4.3 | 11, |
| Animal Caretakers, except Farm | 1,180 | 0.1 | 1,460 | 0.1 | |
| Carpenters' Helpers | 1,620 | 0.1 | 1,290 | 0.1 | |
| Construction Laborers, except Carpenters' Helpers | 15,100 | 1.0 | 18,700 | 0.9 | 3 |
| Fishermen and Oystermen | 300 | * | 310 | * | |
| Freight and Material Handlers | 15,630 | 1.0 | 18,400 | 0.9 | 2 |
| Garbage Collectors | 2,650 | 0.2 | 4,550 | 0.2 | 1 |
| Gardeners and Groundskeepers, except Farm | 6,760 | 0.4 | 6,970 | 0.4 | |
| Longshoremen and Stevedores | 690 | * | 880 | * | |
| Lumbermen, Raftsmen and Woodchoppers | 5,560 | 0.4 | 4,850 | 0.2 | |
| Stock Handlers | 12,800 | 0.8 | 15,960 | 0.8 | 3 |
| Teamsters | 340 | * | 190 | * | |
| Vehicle Washers and Equipment Cleaners | 3,080 | 0.2 | 3,180 | 0.2 | |
| Warehousemen, n.e.c. | 2,660 | 0.2 | 2,840 | 0.1 | |
| Other Laborers, except Farm | 4,980 | 0.3 | 5,070 | 0.3 | |

TABLE 3 - continued

## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| osmetologists | 11,140 | 0.7 | 15,040 | 0.8 | 3,900 | 35 |
| ept private household | 2,450 | 0.2 | 3,660 | 0.2 | 1,210 | 49 |
| pprentices | 60 | * | 30 | * | -30 | -50 |
| | 60 | * | 110 | * | 50 | 73 |
| and amusement | 130 | * | 110 | * | -20 | -12 |
| es | 360 | * | 660 | * | 300 | 84 |
| kers | 18,840 | 1.2 | 27,850 | 1.4 | 9,010 | 48 |
| d bridge tenders | 720 | 0.1 | 1,010 | 0.1 | 290 | 41 |
| ction | 3,430 | 0.2 | 6,130 | 0.3 | 2,700 | 79 |
| en | 7,070 | 0.5 | 8,160 | 0.4 | 1,090 | 15 |
| ables | 140 | * | 220 | * | 80 | 60 |
| ives | 6,530 | 0.4 | 10,680 | 0.5 | 4,150 | 64 |
| | 950 | 0.1 | 1,650 | 0.1 | 700 | 73 |
| kers | 50,350 | 3.2 | 41,830 | 2.1 | -8,520 | -17 |
| | 4,510 | 0.3 | 3,770 | 0.2 | -740 | -16 |
| ehold | 1,910 | 0.1 | 1,700 | 0.1 | -210 | -11 |
| ate household | 2,750 | 0.2 | 2,360 | 0.1 | -390 | -14 |
| te household | 480 | * | 320 | * | -160 | -33 |
| , private household | 40,700 | 2.6 | 33,680 | 1.7 | -7,020 | -17 |
| | 73,350 | 4.6 | 84,650 | 4.3 | 11,300 | 15 |
| cept Farm | 1,180 | 0.1 | 1,460 | 0.1 | 280 | 24 |
| | 1,620 | 0.1 | 1,290 | 0.1 | -330 | -21 |
| , except Carpenters' Helpers | 15,100 | 1.0 | 18,700 | 0.9 | 3,600 | 24 |
| nen | 300 | * | 310 | * | 10 | 4 |
| andlers | 15,630 | 1.0 | 18,400 | 0.9 | 2,770 | 18 |
| | 2,650 | 0.2 | 4,550 | 0.2 | 1,900 | 71 |
| keepers, except Farm | 6,760 | 0.4 | 6,970 | 0.4 | 210 | 3 |
| vedores | 690 | * | 880 | * | 190 | 28 |
| and Woodchoppers | 5,560 | 0.4 | 4,850 | 0.2 | -710 | -13 |
| | 12,800 | 0.8 | 15,960 | 0.8 | 3,160 | 25 |
| | 340 | * | 190 | * | -150 | -45 |
| quipment Cleaners | 3,080 | 0.2 | 3,180 | 0.2 | 100 | 3 |
| | 2,660 | 0.2 | 2,840 | 0.1 | 180 | 7 |
| Farm | 4,980 | 0.3 | 5,070 | 0.3 | 90 | 2 |

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| Occupational Title | 1970 Employment |  | Projected 1980 Requirements |  | 1 |
|---|---|---|---|---|---|
|  | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absol |
| **Farmers and Farm Workers** | 57,110 | 3.6 | 39,500 | 2.0 | -17,6 |
| **Farmers and Farm Managers** | 27,060 | 1.7 | 19,260 | 1.0 | -7,8 |
| **Farmers (owners and tenants)** | 25,720 | 1.6 | 17,320 | 0.9 | -8,4 |
| **Farm managers** | 1,340 | 0.1 | 1,940 | 0.1 | 6 |
| **Farm Laborers and Farm Foremen** | 30,050 | 1.9 | 20,240 | 1.0 | -9,8 |
| **Farm foremen** | 730 | 0.1 | 650 | * | - |
| **Farm laborers, wage workers** | 27,880 | 1.8 | 18,520 | 0.9 | -9,3 |
| **Farm laborers, unpaid family workers** | 1,370 | 0.1 | 970 | 0.1 | - |
| **Farm service laborers, self-employed** | 70 | * | 100 | * |  |

---

1/ Estimates were rounded to ten's.

2/ Percents were computed from unrounded data. Percent change figures are shown as whole numbers.

3/ The 1970 and 1980 "Total, All Industries" employment in Table 1 and the "Total, All Occupations" employment in Table 3 differ bec developed from different data sources. The 1970 occupational employment levels are those reported in the 1970 decennial census for th occupations (after rounding) and are based on place of residence. (Table 3 excludes 158,972 "Not Specified" and "Allocated" cases included in the Census.) The 1970 industry employment estimates, based on place of work, were developed from Georgia Department of Employment Security Agency records, supplemented to include self-employed persons, unpaid family workers, private household workers a job but not at work, and adjusted to exclude the secondary job of multiple job holders.

"n.e.c." denotes "not elsewhere classified."

*Less than 0.05.

" _ " denotes "zero."

## TABLE 3 - continued
## GEORGIA 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION

| | 1970 Employment | | Projected 1980 Requirements | | Change, 1970 – 1980 | |
|---|---|---|---|---|---|---|
| | Number 1/ | Percent 2/ | Number 1/ | Percent 2/ | Absolute | Percent 2/ |
| s | 57,110 | 3.6 | 39,500 | 2.0 | -17,610 | -31 |
| agers | 27,060 | 1.7 | 19,260 | 1.0 | -7,800 | -29 |
| d tenants) | 25,720 | 1.6 | 17,320 | 0.9 | -8,400 | -33 |
| | 1,340 | 0.1 | 1,940 | 0.1 | 600 | 45 |
| m Foremen | 30,050 | 1.9 | 20,240 | 1.0 | -9,810 | -33 |
| | 730 | 0.1 | 650 | * | -80 | -11 |
| workers | 27,880 | 1.8 | 18,520 | 0.9 | -9,360 | -34 |
| id family workers | 1,370 | 0.1 | 970 | 0.1 | -400 | -29 |
| rs, self-employed | 70 | * | 100 | * | 30 | 43 |

ed to ten's.

ted from unrounded data. Percent change figures are shown as whole numbers.

Total, All Industries" employment in Table 1 and the "Total, All Occupations" employment in Table 3 differ because each was ent data sources. The 1970 occupational employment levels are those reported in the 1970 decennial census for the specified nding) and are based on place of residence. (Table 3 excludes 158,972 "Not Specified" and "Allocated" cases which were s.) The 1970 industry employment estimates, based on place of work, were developed from Georgia Department of Labor, Agency records, supplemented to include self-employed persons, unpaid family workers, private household workers, and persons with and adjusted to exclude the secondary job of multiple job holders.

ewhere classified."

## TABLE 4
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment | | Change From 19 |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| **Total, All Occupations** | 1,787,920 | 100.0 | 39,990 |
| **Professional, Technical and Kindred Workers** | 234,480 | 13.1 | 7,000 |
| Engineers, Technical | 20,790 | 1.2 | 480 |
| Aeronautical and astronautical | 2,200 | 0.1 | -30 |
| Chemical | 590 | * | 10 |
| Civil | 4,360 | 0.2 | 120 |
| Electrical and electronic | 4,020 | 0.2 | 110 |
| Industrial | 3,610 | 0.2 | 90 |
| Mechanical | 1,890 | 0.1 | 40 |
| Metallurgical and materials | 210 | * | 10 |
| Mining | 10 | * | - |
| Petroleum | 30 | * | - |
| Sales | 1,320 | 0.1 | 50 |
| Other engineers | 2,550 | 0.1 | 80 |
| Life and Physical Scientists | 2,940 | 0.2 | 70 |
| Agricultural | 380 | * | 10 |
| Atmospheric and space | 110 | * | - |
| Biological | 720 | * | 20 |
| Chemists | 1,460 | 0.1 | 40 |
| Geologists | 90 | * | - |
| Marine | 60 | * | - |
| Physicists and astronomers | 80 | * | - |
| Life and physical scientists, n.e.c. | 40 | * | - |
| Mathematical Specialists | 580 | * | 10 |
| Actuaries | 120 | * | - |
| Mathematicians | 40 | * | - |
| Statisticians | 420 | * | 10 |
| Engineering and Science Technicians | 15,840 | 0.9 | 600 |
| Agricultural and biological technicians, except health | 890 | 0.1 | 40 |
| Chemical technicians | 930 | 0.1 | 20 |
| Draftsmen | 4,680 | 0.3 | 180 |
| Electrical and electronic technicians | 2,430 | 0.1 | 70 |
| Industrial engineering technicians | 500 | * | - |
| Mathematical technicians | 10 | * | - |

## TABLE 4
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 1,787,920 | 100.0 | 39,990 | 200,070 |
| and Kindred Workers | 234,480 | 13.1 | 7,000 | 35,000 |
| | 20,790 | 1.2 | 480 | 2,400 |
| stronautical | 2,200 | 0.1 | -30 | -150 |
| | 590 | * | 10 | 60 |
| | 4,360 | 0.2 | 120 | 600 |
| tronic | 4,020 | 0.2 | 110 | 540 |
| | 3,610 | 0.2 | 90 | 460 |
| | 1,890 | 0.1 | 40 | 200 |
| aterials | 210 | * | 10 | 40 |
| | 10 | * | - | - |
| | 30 | * | - | - |
| | 1,320 | 0.1 | 50 | 250 |
| | 2,550 | 0.1 | 80 | 400 |
| entists | 2,940 | 0.2 | 70 | 330 |
| | 380 | * | 10 | 30 |
| pace | 110 | * | - | 10 |
| | 720 | * | 20 | 80 |
| | 1,460 | 0.1 | 40 | 190 |
| | 90 | * | - | 10 |
| | 60 | * | - | 10 |
| ronomers | 80 | * | - | 10 |
| cientists, n.e.c. | 40 | * | - | -10 |
| sts | 580 | * | 10 | 70 |
| | 120 | * | - | 10 |
| | 40 | * | - | 10 |
| | 420 | * | 10 | 50 |
| ace technicians | 15,840 | 0.9 | 600 | 2,990 |
| ological technicians, except health | 890 | 0.1 | 40 | 180 |
| ans | 930 | 0.1 | 20 | 120 |
| | 4,680 | 0.3 | 180 | 900 |
| tronic technicians | 2,430 | 0.1 | 70 | 330 |
| ing technicians | 500 | * | - | -10 |
| icians | 10 | * | - | - |

## TABLE 4 - continued

## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment | | Change F |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Mechanical engineering technicians | 130 | * | - |
| Surveyors | 1,890 | 0.1 | 60 |
| Engineering and science technicians, n.e.c. | 4,380 | 0.2 | 230 |
| Medical and Health Workers, except Technicians | 31,090 | 1.7 | 960 |
| Chiropractors | 310 | * | 20 |
| Dentists | 1,880 | 0.1 | 80 |
| Dietitians | 1,300 | 0.1 | 40 |
| Optometrists | 340 | * | 10 |
| Pharmacists | 2,560 | 0.1 | 30 |
| Physicians, medical and osteopathic | 5,380 | 0.3 | 160 |
| Podiatrists | 70 | * | - |
| Registered Nurses | 16,900 | 0.9 | 450 |
| Therapists | 1,390 | 0.1 | 70 |
| Veterinarians | 9[illegible]0 | 0.1 | 80 |
| Other medical and health | 20 | * | - |
| Health Technologists and Technicians | 7,250 | 0.4 | 390 |
| Clinical lab technologists and technicians | 3,190 | 0.2 | 160 |
| Dental hygienists | 790 | * | 60 |
| Health record technologists and technicians | 390 | * | 30 |
| Radiologic technologists and technicians | 1,150 | 0.1 | 40 |
| Therapy assistants | 80 | * | 10 |
| Other health technologists and technicians | 1,650 | 0.1 | 90 |
| Technicians, except Health, and Engineering and Science | 6,420 | 0.4 | 220 |
| Airplane pilots | 2,640 | 0.2 | 80 |
| Air traffic controllers | 1,150 | 0.1 | 10 |
| Embalmers | 150 | * | - |
| Flight engineers | 400 | * | 20 |
| Radio operators | 760 | * | 30 |
| Tool programmers, numerical control | 40 | * | - |
| Technicians, n.e.c. | 1,280 | 0.1 | 80 |
| Computer Specialists | 4,160 | 0.2 | 130 |
| Computer programmers | 2,730 | 0.1 | 80 |
| Computer systems analysts | 1,200 | 0.1 | 40 |
| Computer specialists, n.e.c. | 230 | * | 10 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: — | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| ineering technicians | 130 | * | - | -10 |
| | 1,890 | 0.1 | 60 | 310 |
| l science technicians, n.e.c. | 4,380 | 0.2 | 230 | 1,170 |
| Workers, except Technicians | 31,090 | 1.7 | 960 | 4,830 |
| | 310 | * | 20 | 100 |
| | 1,880 | 0.1 | 80 | 410 |
| | 1,300 | 0.1 | 40 | 180 |
| | 340 | * | 10 | 70 |
| | 2,560 | 0.1 | 50 | 270 |
| dical and osteopathic | 5,380 | 0.3 | 160 | 790 |
| | 70 | * | - | 10 |
| ies | 16,900 | 0.9 | 450 | 2,220 |
| | 1,390 | 0.1 | 70 | 360 |
| | 940 | 0.1 | 80 | 410 |
| nd health | 20 | * | - | 10 |
| ts and Technicians | 7,250 | 0.4 | 390 | 1,940 |
| hnologists and technicians | 3,190 | 0.2 | 160 | 810 |
| ts | 790 | * | 60 | 320 |
| chnologists and technicians | 390 | * | 30 | 140 |
| nologists and technicians | 1,150 | 0.1 | 40 | 210 |
| nts | 80 | * | 10 | 30 |
| hnologists and technicians | 1,650 | 0.1 | 90 | 430 |
| pt Health, and Engineering and Science | 6,420 | 0.4 | 220 | 1,070 |
| | 2,640 | 0.2 | 80 | 380 |
| ollers | 1,150 | 0.1 | 10 | 60 |
| | 150 | * | - | - |
| s | 400 | * | 20 | 80 |
| | 760 | * | 30 | 140 |
| rs, numerical control | 40 | * | - | - |
| e.c. | 1,280 | 0.1 | 80 | 410 |
| ts | 4,160 | 0.2 | 130 | 640 |
| mmers | 2,730 | 0.1 | 80 | 390 |
| ns analysts | 1,200 | 0.1 | 40 | 210 |
| alists, n.e.c. | 230 | * | 10 | 40 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From |
|---|---|---|---|
| Occupational Title | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Social Scientists | 2,020 | 0.1 | 110 |
| Economists | 1,210 | 0.1 | 60 |
| Political scientists | 20 | * | - |
| Psychologists | 330 | * | 20 |
| Sociologists | 50 | * | - |
| Urban and regional planners | 330 | * | 30 |
| Social scientists, n.e.c. | 80 | * | - |
| Teachers | 73,800 | 4.1 | 1,720 |
| Adult education teachers | 1,510 | 0.1 | 20 |
| Agriculture teachers | 130 | * | - |
| Art, drama, music teachers | 490 | * | 20 |
| Atmospheric, earth, marine | 100 | * | - |
| Biology teachers | 440 | * | 20 |
| Business, commerce teachers | 290 | * | 10 |
| Chemistry teachers | 270 | * | - |
| Coaches, physical education | 320 | * | - |
| Economics teachers | 230 | * | 10 |
| Education teachers | 100 | * | - |
| Elementary school teachers | 35,710 | 2.0 | 850 |
| Engineering teachers | 220 | * | - |
| English teachers | 650 | * | 10 |
| Foreign language teachers | 420 | * | 20 |
| Health specialties teachers | 830 | 0.1 | 50 |
| History teachers | 330 | * | - |
| Home economics teachers | 110 | * | - |
| Law teachers | 100 | * | 10 |
| Mathematics teachers | 600 | * | 20 |
| Physics teachers | 200 | * | - |
| Preschool, kindergarten teachers | 3,940 | 0.2 | 120 |
| Psychology teachers | 370 | * | 20 |
| Secondary school teachers | 18,940 | 1.1 | 300 |
| Sociology teachers | 180 | * | 10 |
| Social science teachers, n.e.c. | 250 | * | 10 |
| Miscellaneous college and university | 410 | * | 20 |
| College, university, n.e.c. | 3,260 | 0.2 | 130 |
| Theology teachers | 80 | * | 10 |
| Trade, industrial teachers | 80 | * | 10 |
| Teachers, n.e.c., except college and university | 3,240 | 0.2 | 50 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 2,020 | 0.1 | 110 | 540 |
| | 1,210 | 0.1 | 60 | 270 |
| ists | 20 | * | - | 10 |
| | 330 | * | 20 | 100 |
| | 50 | * | - | - |
| ual planners | 330 | * | 30 | 140 |
| s, n.e.c. | 80 | * | - | 20 |
| | 73,800 | 4.1 | 1,720 | 8,600 |
| teachers | 1,510 | 0.1 | 20 | 80 |
| hers | 130 | * | - | 10 |
| c teachers | 490 | * | 20 | 90 |
| rth, marine | 100 | * | - | 10 |
| s | 440 | * | 20 | 90 |
| erce teachers | 290 | * | 10 | 60 |
| ers | 270 | * | - | 10 |
| al education | 320 | * | - | 20 |
| hers | 230 | * | 10 | 40 |
| ers | 100 | * | - | - |
| ol teachers | 35,710 | 2.0 | 850 | 4,250 |
| chers | 220 | * | - | 20 |
| s | 650 | * | 10 | 60 |
| e teachers | 420 | * | 20 | 80 |
| es teachers | 830 | 0.1 | 50 | 250 |
| | 330 | * | - | 10 |
| teachers | 110 | * | - | 10 |
| | 100 | * | 10 | 20 |
| chers | 600 | * | 20 | 100 |
| s | 200 | * | - | - |
| ergarten teachers | 3,940 | 0.2 | 120 | 610 |
| chers | 370 | * | 20 | 100 |
| l teachers | 18,940 | 1.1 | 300 | 1,510 |
| ers | 180 | * | 10 | 60 |
| eachers, n.e.c. | 250 | * | 10 | 50 |
| ollege and university | 410 | * | 20 | 100 |
| ity, n.e.c. | 3,260 | 0.2 | 130 | 660 |
| ers | 80 | * | 10 | 20 |
| l teachers | 80 | * | 10 | 30 |
| , except college and university | 3,240 | 0.2 | 50 | 250 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment |  | Change Fr |
|---|---|---|---|
|  | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Writers, Artists and Entertainers | 12,940 | 0.7 | 390 |
| Actors | 70 | * | - |
| Athletes and kindred workers | 1,090 | 0.1 | 40 |
| Authors | 220 | * | - |
| Dancers | 110 | * | - |
| Designers | 1,420 | 0.1 | 50 |
| Editors and reporters | 2,280 | 0.1 | 80 |
| Musicians and composers | 1,650 | 0.1 | 40 |
| Painters and sculptors | 1,720 | 0.1 | 40 |
| Photographers | 1,280 | 0.1 | 40 |
| Public relations men and publicity writers | 1,510 | 0.1 | 50 |
| Radio and television announcers | 690 | * | 10 |
| Writers, artists and entertainers, n.e.c. | 900 | 0.1 | 40 |
| Other Professional, Technical and Kindred Workers | 56,650 | 3.2 | 1,920 |
| Accountants | 15,910 | 0.9 | 400 |
| Architects | 1,360 | 0.1 | 60 |
| Archivists and curators | 80 | * | - |
| Clergymen | 6,680 | 0.4 | 190 |
| Religious workers, except clergymen | 850 | 0.1 | 20 |
| Farm management advisors | 270 | * | - |
| Foresters and conservationists | 2,150 | 0.1 | 60 |
| Home management advisors | 190 | * | - |
| Judges | 270 | * | 10 |
| Lawyers | 4,800 | 0.3 | 140 |
| Librarians | 3,150 | 0.2 | 100 |
| Operations and systems researchers and analysts | 1,620 | 0.1 | 70 |
| Personnel and labor relations workers | 7,980 | 0.5 | 360 |
| Research workers, n.e.c. | 2,350 | 0.1 | 90 |
| Recreation workers | 1,240 | 0.1 | 50 |
| Social workers | 4,910 | 0.3 | 190 |
| Vocational and educational counselors | 2,840 | 0.2 | 180 |
| Managers, Officials and Proprietors, except Farm | 171,850 | 9.6 | 6,040 |
| Buyers, Sales and Loan Managers | 32,250 | 1.8 | 1,250 |
| Bank and financial managers | 9,660 | 0.5 | 450 |
| Buyers and shippers, farm products | 220 | * | - |
| Buyers, wholesale and retail trade | 3,580 | 0.2 | 130 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| Entertainers | 12,940 | 0.7 | 390 | 1,970 |
| | 70 | * | - | - |
| ed workers | 1,090 | 0.1 | 40 | 200 |
| | 220 | * | - | 10 |
| | 110 | * | - | 20 |
| | 1,420 | 0.1 | 50 | 240 |
| ers | 2,280 | 0.1 | 80 | 410 |
| nposers | 1,650 | 0.1 | 40 | 210 |
| ptors | 1,720 | 0.1 | 40 | 190 |
| | 1,280 | 0.1 | 40 | 190 |
| en and publicity writers | 1,510 | 0.1 | 50 | 260 |
| ion announcers | 690 | * | 10 | 50 |
| d entertainers, n.e.c. | 900 | 0.1 | 40 | 190 |
| Technical and Kindred Workers | 56,650 | 3.2 | 1,920 | 9,620 |
| | 15,910 | 0.9 | 400 | 2,000 |
| | 1,360 | 0.1 | 60 | 300 |
| ators | 80 | * | - | 10 |
| | 6,680 | 0.4 | 190 | 960 |
| , except clergymen | 850 | 0.1 | 20 | 120 |
| advisors | 270 | * | - | -10 |
| servationists | 2,150 | 0.1 | 60 | 300 |
| advisors | 190 | * | - | -10 |
| | 270 | * | 10 | 30 |
| | 4,800 | 0.3 | 140 | 690 |
| | 3,150 | 0.2 | 100 | 490 |
| stems researchers and analysts | 1,620 | 0.1 | 70 | 360 |
| or relations workers | 7,980 | 0.5 | 360 | 1,800 |
| , n.e.c. | 2,350 | 0.1 | 90 | 470 |
| s | 1,240 | 0.1 | 50 | 260 |
| | 4,910 | 0.3 | 190 | 940 |
| ucational counselors | 2,840 | 0.2 | 180 | 910 |
| Proprietors, except Farm | 171,850 | 9.6 | 6,040 | 30,210 |
| an Managers | 32,250 | 1.8 | 1,250 | 6,260 |
| l managers | 9,660 | 0.5 | 450 | 2,260 |
| rs, farm products | 220 | * | - | 10 |
| and retail trade | 3,580 | 0.2 | 130 | 900 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment Number 2/ | Percent of Total 3/ | Change Fro |
|---|---|---|---|
| | | | 1976 2/ |
| Creditmen | 1,820 | 0.1 | 50 |
| Purchasing agents and buyers, n.e.c. | 3,330 | 0.2 | 90 |
| Sales managers and department heads, retail trade | 5,420 | 0.3 | 220 |
| Sales managers, except retail trade | 8,220 | 0.5 | 310 |
| Administrators and Inspectors; public administration | 17,240 | 1.0 | 470 |
| Assessors, controllers and treasurers; local public administration | 620 | * | 30 |
| Construction inspectors; public administration | 450 | * | 20 |
| Health administrators | 1,900 | 0.1 | 90 |
| Inspectors, except construction; public administration | 2,330 | 0.1 | 70 |
| Officials and administrators; public administration, n.e.c. | 6,210 | 0.4 | 70 |
| Postmasters and mail superintendents | 550 | * | -10 |
| School administrators, college | 1,000 | 0.1 | 50 |
| School administrators, elementary and secondary | 4,180 | 0.2 | 150 |
| Other Managers, Officials and Proprietors | 122,360 | 6.8 | 4,320 |
| Funeral directors | 1,080 | 0.1 | 30 |
| Managers and superintendents, building | 1,820 | 0.1 | 60 |
| Office managers, n.e.c. | 6,370 | 0.4 | 300 |
| Officers, pilots and pursers; ship | 230 | * | - |
| Officials of lodges, societies and unions | 990 | 0.1 | 30 |
| Railroad conductors | 990 | 0.1 | 20 |
| Restaurant, cafeteria and bar managers | 8,030 | 0.4 | 220 |
| Other managers and administrators | 102,850 | 5.7 | 3,660 |
| **Sales Workers** | 132,280 | 7.4 | 3,630 |
| Advertising Agents and Salesmen | 1,300 | 0.1 | 50 |
| Auctioneers | 80 | * | - |
| Demonstrators | 880 | * | 20 |
| Hucksters and Peddlers | 2,430 | 0.1 | 70 |
| Insurance Agents, Brokers and Underwriters | 14,270 | 0.8 | 320 |
| Newsboys | 990 | 0.1 | - |
| Real Estate Agents and Brokers | 5,880 | 0.3 | 110 |
| Stock and Bond Salesmen | 1,900 | 0.1 | 100 |
| Sales Representatives, manufacturing industries | 11,860 | 0.7 | 360 |
| Sales Representatives, wholesale trade | 19,160 | 1.1 | 680 |
| Sales Clerks, retail trade | 55,680 | 3.1 | 1,460 |
| Salesmen, retail trade | 12,080 | 0.7 | 270 |
| Salesmen of Services and Construction | 5,770 | 0.3 | 190 |

TABLE 4 - continued

## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 1,820 | 0.1 | 50 | 260 |
| and buyers, n.e.c. | 3,330 | 0.2 | 90 | 180 |
| nd department heads, retail trade | 5,420 | 0.3 | 220 | 1,090 |
| xcept retail trade | 8,220 | 0.5 | 310 | 1,570 |
| | | | | |
| nspectors; public administration | 17,240 | 1.0 | 470 | 2,330 |
| llers and treasurers; local public administration | 620 | * | 30 | 140 |
| ectors; public administration | 450 | * | 20 | 90 |
| tors | 1,900 | 0.1 | 90 | 440 |
| t construction; public administration | 2,330 | 0.1 | 70 | 340 |
| inistrators; public administration, n.e.c. | 6,210 | 0.4 | 70 | 350 |
| mail superintendents | 550 | * | -10 | -40 |
| tors, college | 1,000 | 0.1 | 50 | 260 |
| tors, elementary and secondary | 4,180 | 0.2 | 150 | 750 |
| | | | | |
| cials and Proprietors | 122,360 | 6.8 | 4,320 | 21,620 |
| | 1,080 | 0.1 | 30 | 130 |
| erintendents, building | 1,820 | 0.1 | 60 | 310 |
| n.e.c. | 6,370 | 0.4 | 300 | 1,500 |
| nd pursers; ship | 230 | * | - | 30 |
| s, societies and unions | 990 | 0.1 | 30 | 130 |
| rs | 990 | 0.1 | 20 | 100 |
| eria and bar managers | 8,030 | 0.4 | 220 | 1,110 |
| nd administrators | 102,850 | 5.7 | 3,660 | 18,310 |
| | | | | |
| | 132,280 | 7.4 | 3,630 | 18,140 |
| and Salesmen | 1,300 | 0.1 | 50 | 250 |
| | 80 | * | - | - |
| | 880 | * | 20 | 80 |
| lers | 2,430 | 0.1 | 70 | 350 |
| rokers and Underwriters | 14,270 | 0.8 | 320 | 1,610 |
| | 990 | 0.1 | - | -10 |
| and Brokers | 5,880 | 0.3 | 110 | 550 |
| smen | 1,900 | 0.1 | 100 | 490 |
| es, manufacturing industries | 11,860 | 0.7 | 360 | 1,810 |
| es, wholesale trade | 19,160 | 1.1 | 680 | 3,400 |
| trade | 55,680 | 3.1 | 1,460 | 7,320 |
| le | 12,080 | 0.7 | 270 | 1,350 |
| s and Construction | 5,770 | 0.3 | 190 | 940 |

## TABLE 4 - continued

## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment Number 2/ | Interpolated 1975 Employment Percent of Total 3/ | Change Fro 1976 2/ |
|---|---|---|---|
| **Clerical and Kindred Workers** | 290,080 | 16.2 | 8,070 |
| Stenographers, Typists and Secretaries | 88,940 | 5.0 | 3,070 |
| Secretaries, legal | 1,340 | 0.1 | 60 |
| Secretaries, medical | 1,400 | 0.1 | 70 |
| Secretaries, other | 65,150 | 3.6 | 2,510 |
| Stenographers | 2,210 | 0.1 | -70 |
| Typists | 18,840 | 1.1 | 500 |
| Office Machine Operators | 10,570 | 0.6 | 110 |
| Bookkeeping and billing machine | 1,110 | 0.1 | 30 |
| Calculating machine | 540 | * | - |
| Computer and peripheral equipment | 2,640 | 0.2 | 120 |
| Duplicating machine | 300 | * | 10 |
| Keypunch | 5,290 | 0.3 | -80 |
| Tabulating machine | 70 | * | - |
| Other office machine operators | 620 | * | 30 |
| Other Clerical Workers | 190,570 | 10.7 | 4,890 |
| Bank tellers | 5,780 | 0.3 | 230 |
| Billing clerks | 3,070 | 0.2 | 150 |
| Bookkeepers | 36,350 | 2.0 | 820 |
| Cashiers | 20,290 | 1.1 | 570 |
| Clerical assistants, social welfare | 40 | * | - |
| Clerical supervisors, n.e.c. | 3,280 | 0.2 | 80 |
| Collectors, bill and account | 1,810 | 0.1 | 70 |
| Counter clerks, except food | 6,650 | 0.4 | 270 |
| Dispatchers and starters, vehicle | 1,330 | 0.1 | 40 |
| Enumerators and interviewers | 1,800 | 0.1 | -30 |
| Estimators and investigators, n.e.c. | 6,200 | 0.4 | 210 |
| Expediters and production controllers | 4,030 | 0.2 | 60 |
| File clerks | 7,000 | 0.4 | 120 |
| Insurance adjusters, examiners and investigators | 1,850 | 0.1 | 50 |
| Library attendants and assistants | 2,360 | 0.1 | 70 |
| Mail carriers, post office | 4,970 | 0.3 | 20 |
| Mail handlers, except post office | 2,890 | 0.2 | 90 |
| Messengers and office boys | 500 | * | - |
| Meter readers, utilities | 970 | 0.1 | 20 |
| Payroll and timekeeping clerks | 3,930 | 0.2 | 120 |

## TABLE 4 - continued

## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

|  | Interpolated 1975 Employment |  | Change From 1975 To: - |  |
|---|---|---|---|---|
|  | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| ed Workers | 290,080 | 16.2 | 8,070 | 40,330 |
| Typists and Secretaries | 88,940 | 5.0 | 3,070 | 15,350 |
| legal | 1,340 | 0.1 | 60 | 290 |
| medical | 1,400 | 0.1 | 70 | 350 |
| other | 65,150 | 3.6 | 2,510 | 12,570 |
| rs | 2,210 | 0.1 | -70 | -350 |
|  | 18,840 | 1.1 | 500 | 2,490 |
|  |  |  |  |  |
| Operators | 10,570 | 0.6 | 110 | 510 |
| and billing machine | 1,110 | 0.1 | 30 | 140 |
| machine | 540 | * | - | 20 |
| d peripheral equipment | 2,640 | 0.2 | 120 | 620 |
| machine | 300 | * | 10 | 50 |
|  | 5,290 | 0.3 | -80 | -420 |
| achine | 70 | * | - | -20 |
| machine operators | 620 | * | 30 | 120 |
|  |  |  |  |  |
| Workers | 190,570 | 10.7 | 4,890 | 24,470 |
|  | 5,780 | 0.3 | 230 | 1,140 |
| ts | 3,070 | 0.2 | 150 | 750 |
|  | 36,350 | 2.0 | 820 | 4,100 |
|  | 20,290 | 1.1 | 570 | 2,860 |
| istants, social welfare | 40 | * | - | 10 |
| ervisors, n.e.c. | 3,280 | 0.2 | 80 | 400 |
| bill and account | 1,810 | 0.1 | 70 | 340 |
| ks, except food | 6,650 | 0.4 | 270 | 1,360 |
| and starters, vehicle | 1,330 | 0.1 | 40 | 210 |
| and interviewers | 1,800 | 0.1 | -30 | -140 |
| nd investigators, n.e.c. | 6,200 | 0.4 | 210 | 1,040 |
| nd production controllers | 4,030 | 0.2 | 60 | 300 |
|  | 7,000 | 0.4 | 120 | 620 |
| justers, examiners and investigators | 1,850 | 0.1 | 50 | 230 |
| ndants and assistants | 2,360 | 0.1 | 70 | 360 |
| , post office | 4,970 | 0.3 | 20 | 100 |
| s, except post office | 2,890 | 0.2 | 90 | 430 |
| and office boys | 500 | * | - | - |
| s, utilities | 970 | 0.1 | 20 | 80 |
| timekeeping clerks | 3,930 | 0.2 | 120 | 600 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment<br>Number 2/ | Interpolated 1975 Employment<br>Percent of Total 3/ | Change F<br>1976 2/ |
|---|---|---|---|
| Postal clerks | 5,330 | 0.3 | - |
| Proofreaders | 510 | * | 20 |
| Real estate appraisers | 470 | * | 20 |
| Receptionists | 5,940 | 0.3 | 170 |
| Shipping and receiving clerks | 13,560 | 0.8 | 300 |
| Statistical clerks | 5,270 | 0.3 | 100 |
| Stock clerks and storekeepers | 13,480 | 0.8 | 300 |
| Teacher aides, except school monitors | 3,150 | 0.2 | 230 |
| Telegraph messengers | 10 | * | - |
| Telegraph operators | 230 | * | - |
| Telephone operators | 9,640 | 0.5 | 140 |
| Ticket, station and express agents | 3,890 | 0.2 | 100 |
| Weighers | 1,340 | 0.1 | 10 |
| Miscellaneous clerical workers, n.e.c. | 12,650 | 0.7 | 540 |
| **Craftsmen, Foremen and Kindred Workers** | 256,910 | 14.4 | 6,240 |
| Construction Craftsmen | 83,740 | 4.7 | 2,640 |
| Brickmasons and stonemasons | 7,530 | 0.4 | 260 |
| Brickmason and stonemason apprentices | 90 | * | - |
| Bulldozer operators | 3,930 | 0.2 | 110 |
| Carpenters | 26,280 | 1.5 | 760 |
| Carpenter apprentices | 120 | * | 10 |
| Cement and concrete finishers | 2,280 | 0.1 | 120 |
| Electricians | 12,210 | 0.7 | 440 |
| Electrician apprentices | 400 | * | 20 |
| Excavating, grading and road machine operators, except bulldozer | 6,160 | 0.3 | 190 |
| Floor layers, except tile setters | 860 | 0.1 | 30 |
| Painters, construction and maintenance | 9,170 | 0.5 | 130 |
| Painter apprentices | 30 | * | - |
| Paperhangers | 280 | * | 10 |
| Plasterers | 360 | * | 10 |
| Plasterer apprentices | - | - | - |
| Plumbers and pipefitters | 8,650 | 0.5 | 320 |
| Plumber and pipefitter apprentices | 300 | * | 10 |
| Roofers and slaters | 2,320 | 0.1 | 120 |
| Structural metal craftsmen | 1,590 | 0.1 | 70 |
| Tile setters | 1,180 | 0.1 | 30 |

### TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 5,330 | 0.3 | - | -10 |
| | 510 | * | 20 | 110 |
| raisers | 470 | * | 20 | 90 |
| | 5,940 | 0.3 | 170 | 860 |
| ceiving clerks | 13,560 | 0.8 | 300 | 1,510 |
| ks | 5,270 | 0.3 | 100 | 520 |
| d storekeepers | 13,480 | 0.8 | 300 | 1,510 |
| except school monitors | 3,150 | 0.2 | 230 | 1,160 |
| engers | 10 | * | - | - |
| tors | 230 | * | - | -10 |
| ators | 9,640 | 0.5 | 140 | 700 |
| and express agents | 3,890 | 0.2 | 100 | 510 |
| | 1,340 | 0.1 | 10 | 40 |
| lerical workers, n.e.c. | 12,650 | 0.7 | 540 | 2,690 |
| nd Kindred Workers | 256,910 | 14.4 | 6,240 | 31,240 |
| smen | 83,740 | 4.7 | 2,640 | 13,200 |
| d stonemasons | 7,530 | 0.4 | 260 | 1,310 |
| stonemason apprentices | 90 | * | - | - |
| tors | 3,930 | 0.2 | 110 | 560 |
| | 26,280 | 1.5 | 760 | 3,780 |
| ntices | 120 | * | 10 | 30 |
| crete finishers | 2,280 | 0.1 | 120 | 590 |
| | 12,210 | 0.7 | 440 | 2,200 |
| rentices | 400 | * | 20 | 90 |
| ding and road machine operators, except bulldozer | 6,160 | 0.3 | 190 | 950 |
| cept tile setters | 860 | 0.1 | 30 | 160 |
| uction and maintenance | 9,170 | 0.5 | 130 | 650 |
| ices | 30 | * | - | - |
| | 280 | * | 10 | 60 |
| | 360 | * | 10 | 40 |
| ntices | - | - | - | - |
| ipefitters | 8,650 | 0.5 | 320 | 1,600 |
| efitter apprentices | 300 | * | 10 | 60 |
| ters | 2,320 | 0.1 | 120 | 620 |
| craftsmen | 1,590 | 0.1 | 70 | 350 |
| | 1,180 | 0.1 | 30 | 150 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment | | Change Fr |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Foremen, n.e.c. | 42,460 | 2.4 | 940 |
| Metalworking Craftsmen, except Mechanics | 14,980 | 0.8 | 290 |
| Blacksmiths | 160 | * | - |
| Boilermakers | 780 | * | 30 |
| Heat treaters, annealers and temperers | 60 | * | - |
| Forgemen and hammermen | 140 | * | - |
| Job and die setters, metal | 310 | * | 10 |
| Machinists | 6,430 | 0.4 | 130 |
| Machinist apprentices | 100 | * | - |
| Millwrights | 860 | 0.1 | 20 |
| Molders, metal | 590 | * | 10 |
| Molder apprentices | 10 | * | - |
| Pattern and model makers, except paper | 330 | * | - |
| Rollers and finishers, metal | 210 | * | 10 |
| Sheetmetal workers and tinsmiths | 3,290 | 0.2 | 50 |
| Sheetmetal worker apprentices | 130 | * | 10 |
| Tool and die makers | 1,540 | 0.1 | 20 |
| Tool and die maker apprentices | 40 | * | - |
| Mechanics, Repairmen and Installers | 70,790 | 4.0 | 1,400 |
| Air conditioning, heating and refrigeration | 4,810 | 0.3 | 280 |
| Aircraft | 8,060 | 0.4 | 150 |
| Automobile accessories installers | 230 | * | - |
| Automobile body repairmen | 2,460 | 0.1 | - |
| Automobile mechanics | 21,380 | 1.2 | 190 |
| Automobile mechanic apprentices | 50 | * | - |
| Data processing machine repairmen | 860 | 0.1 | 50 |
| Farm implement | 540 | * | 10 |
| Heavy equipment mechanics, including diesel | 16,980 | 1.0 | 470 |
| Household appliance mechanics | 3,620 | 0.2 | 120 |
| Loom fixers | 2,250 | 0.1 | - |
| Office machine repairmen | 940 | * | 20 |
| Radio and television repairmen | 3,610 | 0.2 | 30 |
| Railroad and car shop repairmen | 1,220 | 0.1 | 20 |
| Mechanic, except automobile, apprentice | 170 | * | 10 |
| Other mechanics and repairmen | 3,610 | 0.2 | 50 |

TABLE 4 - continued

## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: - | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| | 42,460 | 2.4 | 940 | 4,720 |
| nen, except Mechanics | 14,980 | 0.8 | 290 | 1,450 |
| | 160 | * | - | - |
| | 780 | * | 30 | 140 |
| nealers and temperers | 60 | * | - | - |
| nmermen | 140 | * | - | 10 |
| rs, metal | 310 | * | 10 | 60 |
| | 6,430 | 0.4 | 130 | 650 |
| tices | 100 | * | - | 10 |
| | 860 | 0.1 | 20 | 90 |
| | 590 | * | 10 | 70 |
| es | 10 | * | - | - |
| l makers, except paper | 330 | * | - | 10 |
| hers, metal | 210 | * | 10 | 50 |
| rs and tinsmiths | 3,290 | 0.2 | 50 | 230 |
| r apprentices | 130 | * | 10 | 30 |
| ers | 1,540 | 0.1 | 20 | 100 |
| er apprentices | 40 | * | - | - |
| en and Installers | 70,790 | 4.0 | 1,400 | 7,030 |
| heating and refrigeration | 4,810 | 0.3 | 280 | 1,400 |
| | 8,060 | 0.4 | 150 | 760 |
| ssories installers | 230 | * | - | - |
| repairmen | 2,460 | 0.1 | - | -30 |
| anics | 21,380 | 1.2 | 190 | 950 |
| anic apprentices | 50 | * | - | - |
| machine repairmen | 860 | 0.1 | 50 | 250 |
| | 540 | * | 10 | 60 |
| mechanics, including diesel | 16,980 | 1.0 | 470 | 2,370 |
| nce mechanics | 3,620 | 0.2 | 120 | 620 |
| | 2,250 | 0.1 | - | -10 |
| epairmen | 940 | * | 20 | 130 |
| sion repairmen | 3,610 | 0.2 | 30 | 150 |
| shop repairmen | 1,220 | 0.1 | 20 | 80 |
| automobile, apprentice | 170 | * | 10 | 40 |
| and repairmen | 3,610 | 0.2 | 50 | 260 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment | | Change Fro |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Printing Trade Craftsmen | 7,290 | 0.4 | 150 |
| Bookbinders | 520 | * | 10 |
| Compositors and typesetters | 3,000 | 0.2 | 50 |
| Electrotypers and stereotypers | 70 | * | - |
| Engravers, except photoengravers | 170 | * | - |
| Photoengravers and lithographers | 500 | * | 20 |
| Pressmen and plate printers | 2,870 | 0.2 | 70 |
| Pressmen apprentices | 110 | * | - |
| Printing trade apprentices, except pressman | 50 | * | - |
| Transportation and Public Utility Craftsmen | 12,790 | 0.7 | 350 |
| Electric power linemen and cablemen | 2,680 | 0.2 | 70 |
| Locomotive engineers | 1,220 | 0.1 | 30 |
| Locomotive firemen | 130 | * | - |
| Power station operators | 350 | * | - |
| Telephone installers and repairmen | 6,990 | 0.3 | 230 |
| Telephone linemen and splicers | 1,420 | 0.1 | 20 |
| Other Craftsmen and Kindred Workers | 24,860 | 1.4 | 470 |
| Bakers | 1,720 | * | 20 |
| Cabinetmakers | 2,140 | * | 30 |
| Carpet installers | 1,350 | 0.1 | 40 |
| Cranemen, derrickmen and hoistmen | 2,670 | 0.2 | 90 |
| Decorators and window dressers | 1,820 | 0.1 | 30 |
| Dental laboratory technicians | 480 | * | 10 |
| Furniture and wood finishers | 430 | * | - |
| Furriers | 10 | * | - |
| Glaziers | 780 | * | 30 |
| Inspectors, scalers and graders; log and lumber | 590 | * | 10 |
| Inspectors, n.e.c. | 2,170 | 0.1 | 60 |
| Jewelers and watchmakers | 720 | * | 10 |
| Millers, grain, flour and feed | 180 | * | - |
| Motion picture projectionists | 280 | * | - |
| Opticians and lens grinders and polishers | 430 | * | 20 |
| Piano and organ tuners and repairmen | 150 | * | - |
| Shipfitters | 30 | * | - |
| Shoe repairmen | 580 | * | - |
| Sign painters and letterers | 390 | * | - |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| en | 7,290 | 0.4 | 150 | 780 |
| | 520 | * | 10 | 50 |
| pesetters | 3,000 | 0.2 | 50 | 250 |
| stereotypers | 70 | * | - | - |
| photoengravers | 170 | * | - | - |
| l lithographers | 500 | * | 20 | 100 |
| printers | 2,870 | 0.2 | 70 | 360 |
| res | 110 | * | - | 20 |
| entices, except pressman | 50 | * | - | - |
| blic Utility Craftsmen | 12,790 | 0.7 | 350 | 1,760 |
| men and cablemen | 2,680 | 0.2 | 70 | 350 |
| ers | 1,220 | 0.1 | 30 | 140 |
| n | 130 | * | - | -10 |
| ators | 350 | * | - | 10 |
| s and repairmen | 6,990 | 0.3 | 230 | 1,170 |
| and splicers | 1,420 | 0.1 | 20 | 100 |
| indred Workers | 24,860 | 1.4 | 470 | 2,300 |
| | 1,720 | * | 20 | 110 |
| | 2,140 | * | 30 | 150 |
| | 1,350 | 0.1 | 40 | 220 |
| en and hoistmen | 2,670 | 0.2 | 90 | 420 |
| dow dressers | 1,820 | 0.1 | 30 | 150 |
| echnicians | 480 | * | 10 | 40 |
| finishers | 430 | * | - | - |
| | 10 | * | - | - |
| | 780 | * | 30 | 150 |
| and graders; log and lumber | 590 | * | 10 | 40 |
| | 2,170 | 0.1 | 60 | 290 |
| makers | 720 | * | 10 | 60 |
| and feed | 180 | * | - | - |
| ectionists | 280 | * | - | -20 |
| grinders and polishers | 430 | * | 20 | 100 |
| ners and repairmen | 150 | * | - | - |
| | 30 | * | - | - |
| | 580 | * | - | -20 |
| etterers | 390 | * | - | - |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change F<br>1976 2/ |
|---|---|---|---|
| Stationary engineers | 2,600 | 0.2 | 40 |
| Stone cutters and stone carvers | 470 | * | - |
| Tailors | 1,730 | 0.1 | 20 |
| Upholsterers | 1,650 | 0.1 | 30 |
| Craftsmen and kindred workers, n.e.c. | 1,290 | 0.1 | 20 |
| Craftsman apprentices, n.e.c. | 200 | * | 10 |
| Operatives and Kindred Workers | 350,040 | 19.6 | 5,310 |
| Operatives, except Transport | 274,570 | 15.4 | 3,760 |
| Semiskilled metalworking | 17,950 | 1.0 | 590 |
| Drill press operatives | 500 | * | - |
| Furnacemen, smeltermen and pourers | 620 | * | 20 |
| Grinding machine operatives | 770 | * | 10 |
| Heaters, metal | 40 | * | - |
| Lathe and milling machine operatives | 830 | 0.1 | 10 |
| Metal platers | 280 | * | 10 |
| Precision machine operatives, n.e.c. | 630 | * | 10 |
| Punch and stamping press operatives | 1,510 | 0.1 | 40 |
| Solderers | 70 | * | - |
| Welders and flame cutters | 12,700 | 0.7 | 490 |
| Semiskilled textile | 47,750 | 2.7 | -140 |
| Carding, lapping and combing operatives | 2,080 | 0.1 | -70 |
| Knitters, loopers and toppers | 860 | 0.1 | - |
| Spinners, twisters and winders | 20,590 | 1.1 | 70 |
| Weavers | 5,150 | 0.3 | -90 |
| Textile operatives, n.e.c. | 19,070 | 1.1 | -50 |
| Semiskilled packing and inspecting | 39,490 | 2.2 | 1,000 |
| Checkers, examiners and inspectors; manufacturing | 19,790 | 1.1 | 530 |
| Graders and sorters, manufacturing | 1,260 | 0.1 | 20 |
| Meat wrappers, retail trade | 880 | 0.1 | 30 |
| Packers and wrappers, except meat and produce | 16,710 | 0.9 | 410 |
| Produce graders and packers, except factory and farm | 850 | 0.1 | 10 |
| Other Operatives, except Transport | 169,380 | 9.5 | 2,310 |
| Asbestos and insulation workers | 660 | * | 20 |
| Assemblers | 17,480 | 1.0 | 320 |

TABLE 4 - continued

### GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| eers | 2,600 | 0.2 | 40 | 210 |
| d stone carvers | 470 | * | - | 20 |
| | 1,730 | 0.1 | 20 | 110 |
| | 1,650 | 0.1 | 30 | 140 |
| indred workers, n.e.c. | 1,290 | 0.1 | 20 | 100 |
| ntices, n.e.c. | 200 | * | 10 | 30 |
| d Workers | 350,040 | 19.6 | 5,310 | 26,680 |
| Transport | 274,570 | 15.4 | 3,760 | 18,910 |
| lworking | 17,950 | 1.0 | 590 | 2,980 |
| peratives | 500 | * | - | 20 |
| smeltermen and pourers | 620 | * | 20 | 120 |
| hine operatives | 770 | * | 10 | 70 |
| l | 40 | * | - | - |
| lling machine operatives | 830 | 0.1 | 10 | 40 |
| | 280 | * | 10 | 40 |
| chine operatives, n.e.c. | 630 | * | 10 | 60 |
| mping press operatives | 1,510 | 0.1 | 40 | 190 |
| | 70 | * | - | -10 |
| lame cutters | 12,700 | 0.7 | 490 | 2,450 |
| ile | 47,750 | 2.7 | -140 | -680 |
| ing and combing operatives | 2,080 | 0.1 | -70 | -330 |
| pers and toppers | 860 | 0.1 | - | - |
| sters and winders | 20,590 | 1.1 | 70 | 360 |
| | 5,150 | 0.3 | -90 | -470 |
| tives, n.e.c. | 19,070 | 1.1 | -50 | -240 |
| ting and inspecting | 39,490 | 2.2 | 1,000 | 5,030 |
| aminers and inspectors; manufacturing | 19,790 | 1.1 | 530 | 2,670 |
| porters, manufacturing | 1,260 | 0.1 | 20 | 80 |
| , retail trade | 880 | 0.1 | 30 | 140 |
| wrappers, except meat and produce | 16,710 | 0.9 | 410 | 2,070 |
| ers and packers, except factory and farm | 850 | 0.1 | 10 | 70 |
| xcept Transport | 169,380 | 9.5 | 2,310 | 11,580 |
| ulation workers | 660 | * | 20 | 110 |
| | 17,480 | 1.0 | 320 | 1,620 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change Fro |
|---|---|---|---|
| Occupational Title | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Blasters and powdermen | 80 | * | - |
| Bottling and canning operatives | 850 | 0.1 | 10 |
| Chainmen, rodmen and axmen; surveying | 350 | * | 10 |
| Clothing ironers and pressers | 5,910 | 0.3 | -60 |
| Cutting operatives, n.e.c. | 5,480 | 0.3 | 110 |
| Dressmakers and seamstresses, except factory | 2,300 | 0.1 | 40 |
| Drillers, earth | 840 | 0.1 | 10 |
| Drywall installers and lathers | 1,700 | 0.1 | 90 |
| Dyers | 2,420 | 0.1 | 60 |
| Filers, polishers, sanders and buffers | 1,940 | 0.1 | -10 |
| Garage workers and gas station attendants | 10,710 | 0.6 | 70 |
| Laundry and dry cleaning operatives, n.e.c. | 3,790 | 0.2 | 30 |
| Meat cutters and butchers, except manufacturing | 3,960 | 0.2 | 10 |
| Meat cutters and butchers, manufacturing | 2,420 | 0.1 | 40 |
| Milliners | 10 | * | - |
| Mine operatives, n.e.c. | 1,780 | 0.1 | -30 |
| Mixing operatives | 2,100 | 0.1 | 40 |
| Oilers and greasers, except auto | 960 | 0.1 | - |
| Painters, manufactured articles | 2,340 | 0.1 | 10 |
| Photographic process workers | 1,040 | 0.1 | 30 |
| Riveters and fasteners | 540 | * | - |
| Sailors and deckhands | 200 | * | - |
| Sawyers | 4,140 | 0.2 | 90 |
| Sewers and stitchers | 51,110 | 2.9 | 920 |
| Shoemaking machine operatives | 790 | * | -30 |
| Stationary firemen | 1,910 | 0.1 | 10 |
| Winding operatives, n.e.c. | 1,710 | 0.1 | 30 |
| Miscellaneous machine operatives | 22,390 | 1.3 | 390 |
| Operatives, n.e.c. | 17,470 | 1.0 | 100 |
| Transport Equipment Operatives | 75,470 | 4.2 | 1,550 |
| Boatmen and canalmen | 50 | * | - |
| Bus drivers | 6,530 | 0.4 | 260 |
| Conductors and motormen, urban rail transit | 50 | * | - |
| Deliverymen and routemen | 14,970 | 0.8 | 380 |
| Fork lift and tow motor operatives | 7,040 | 0.4 | 160 |
| Motormen: mine, factory, logging, camp, etc. | 60 | * | - |
| Parking attendants | 550 | * | 10 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

|  | Interpolated 1975 Employment |  | Change From 1975 To: – |  |
|---|---|---|---|---|
|  | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| en | 80 | * | - | - |
| operatives | 850 | 0.1 | 10 | 60 |
| l axmen; surveying | 350 | * | 10 | 40 |
| pressers | 5,910 | 0.3 | -60 | -290 |
| e.c. | 5,480 | 0.3 | 110 | 550 |
| nstresses, except factory | 2,300 | 0.1 | 40 | 170 |
|  | 840 | 0.1 | 10 | 50 |
| l lathers | 1,700 | 0.1 | 90 | 460 |
|  | 2,420 | 0.1 | 60 | 310 |
| ders and buffers | 1,940 | 0.1 | -10 | -50 |
| ss station attendants | 10,710 | 0.6 | 70 | 320 |
| ing operatives, n.e.c. | 3,790 | 0.2 | 30 | 150 |
| hers, except manufacturing | 3,960 | 0.2 | 10 | 60 |
| hers, manufacturing | 2,420 | 0.1 | 40 | 190 |
|  | 10 | * | - | - |
| :. | 1,780 | 0.1 | -30 | -130 |
|  | 2,100 | 0.1 | 40 | 190 |
| except auto | 960 | 0.1 | - | 10 |
| d articles | 2,340 | 0.1 | 10 | 50 |
| workers | 1,040 | 0.1 | 30 | 160 |
| s | 540 | * | - | 10 |
|  | 200 | * | - | - |
|  | 4,140 | 0.2 | 90 | 460 |
|  | 51,110 | 2.9 | 920 | 4,600 |
| operatives | 790 | * | -30 | -150 |
|  | 1,910 | 0.1 | 10 | 50 |
| .e.c. | 1,710 | 0.1 | 30 | 150 |
| e operatives | 22,390 | 1.3 | 390 | 1,950 |
|  | 17,470 | 1.0 | 100 | 480 |
| ratives | 75,470 | 4.2 | 1,550 | 7,770 |
| n | 50 | * | - | - |
|  | 6,530 | 0.4 | 260 | 1,310 |
| men, urban rail transit | 50 | * | - | 10 |
| smen | 14,970 | 0.8 | 380 | 1,880 |
| r operatives | 7,040 | 0.4 | 160 | 800 |
| ory, logging, camp, etc. | 60 | * | - | 10 |
|  | 550 | * | 10 | 30 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment | | Change |
|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ |
| Railroad brakemen | 840 | 0.1 | 10 |
| Railroad switchmen | 1,520 | 0.1 | 20 |
| Taxicab drivers and chauffeurs | 2,950 | 0.2 | -10 |
| Truck drivers | 40,910 | 2.3 | 720 |
| Service Workers | 224,980 | 12.6 | 4,330 |
| Cleaning Service Workers | 45,440 | 2.5 | 1,360 |
| Chambermaids and maids, except private household | 7,980 | 0.4 | 310 |
| Cleaners and charwomen | 10,350 | 0.6 | 160 |
| Janitors and sextons | 27,110 | 1.5 | 890 |
| Food Service Workers | 54,120 | 3.0 | 1,180 |
| Bartenders | 1,280 | 0.1 | 30 |
| Busboys | 910 | 0.1 | 10 |
| Cooks, except private household | 22,620 | 1.3 | 470 |
| Dishwashers | 2,630 | 0.1 | 70 |
| Food counter and fountain workers | 2,320 | 0.1 | - |
| Waiters | 18,320 | 1.0 | 440 |
| Food service workers, n.e.c., except private household | 6,040 | 0.3 | 160 |
| Health Service Workers | 26,460 | 1.5 | 940 |
| Dental assistants | 1,800 | 0.1 | 90 |
| Health aides, except nursing | 2,810 | 0.2 | 160 |
| Health trainees | 300 | * | -30 |
| Lay midwives | 10 | * | - |
| Nursing aides, orderlies and attendants | 15,770 | 0.9 | 450 |
| Practical nurses | 5,770 | 0.3 | 270 |
| Personal Service Workers | 29,520 | 1.6 | 800 |
| Airline stewardesses | 1,960 | 0.1 | 100 |
| Attendants, recreation and amusement | 990 | 0.1 | 30 |
| Attendants, personal service, n.e.c. | 770 | * | 10 |
| Baggage porters and bellhops | 470 | * | -20 |
| Barbers | 3,910 | 0.2 | 30 |
| Boarding and lodging housekeepers | 110 | * | -10 |
| Bootblacks | 70 | * | - |
| Child care workers, except private household | 4,030 | 0.2 | 140 |
| Elevator operators | 300 | * | -20 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| men | 840 | 0.1 | 10 | 50 |
| men | 1,520 | 0.1 | 20 | 120 |
| and chauffeurs | 2,950 | 0.2 | -10 | -50 |
| | 40,910 | 2.3 | 720 | 3,610 |
| | 224,980 | 12.6 | 4,330 | 21,620 |
| orkers | 45,440 | 2.5 | 1,360 | 6,820 |
| nd maids, except private household | 7,980 | 0.4 | 310 | 1,560 |
| arwomen | 10,350 | 0.6 | 160 | 810 |
| xtons | 27,110 | 1.5 | 890 | 4,450 |
| ers | 54,120 | 3.0 | 1,180 | 5,880 |
| | 1,280 | 0.1 | 30 | 150 |
| | 910 | 0.1 | 10 | 60 |
| rivate household | 22,620 | 1.3 | 470 | 2,360 |
| | 2,630 | 0.1 | 70 | 330 |
| d fountain workers | 2,320 | 0.1 | - | 10 |
| | 18,320 | 1.0 | 440 | 2,200 |
| orkers, n.e.c., except private household | 6,040 | 0.3 | 160 | 770 |
| kers | 26,460 | 1.5 | 940 | 4,670 |
| s | 1,800 | 0.1 | 90 | 430 |
| cept nursing | 2,810 | 0.2 | 160 | 800 |
| | 300 | * | -30 | -170 |
| | 10 | * | - | - |
| rderlies and attendants | 15,770 | 0.9 | 450 | 2,270 |
| s | 5,770 | 0.3 | 270 | 1,340 |
| orkers | 29,520 | 1.6 | 800 | 4,010 |
| sses | 1,960 | 0.1 | 100 | 510 |
| eation and amusement | 990 | 0.1 | 30 | 150 |
| onal service, n.e.c. | 770 | * | 10 | 40 |
| and bellhops | 470 | * | -20 | -70 |
| | 3,910 | 0.2 | 30 | 140 |
| lging housekeepers | 110 | * | -10 | -70 |
| | 70 | * | - | -20 |
| ers, except private household | 4,030 | 0.2 | 140 | 710 |
| ers | 300 | * | -20 | -80 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change Fr<br>1976 2/ |
|---|---|---|---|
| Hairdressers and cosmetologists | 13,090 | 0.7 | 390 |
| Housekeepers, except private household | 3,060 | 0.2 | 120 |
| Personal service apprentices | 40 | * | - |
| School monitors | 90 | * | - |
| Ushers, recreation and amusement | 120 | * | - |
| Welfare service aides | 510 | * | 30 |
| Protective Service Workers | 23,350 | 1.3 | 900 |
| Crossing guards and bridge tenders | 860 | 0.1 | 30 |
| Firemen, fire protection | 4,790 | 0.3 | 270 |
| Guards and watchmen | 7,610 | 0.4 | 110 |
| Marshals and constables | 180 | * | 10 |
| Policemen and detectives | 8,610 | 0.5 | 410 |
| Sheriffs and bailiffs | 1,300 | 0.1 | 70 |
| Private Household Workers | 46,090 | 2.6 | -850 |
| Child care workers | 4,130 | 0.2 | -70 |
| Cooks, private household | 1,800 | 0.1 | -20 |
| Housekeepers, private household | 2,560 | 0.1 | -40 |
| Laundresses, private household | 410 | * | -20 |
| Maids and servants, private household | 37,190 | 2.1 | -700 |
| Laborers, except Farm | 78,990 | 4.4 | 1,140 |
| Animal Caretakers, except Farm | 1,320 | 0.1 | 30 |
| Carpenters' Helpers | 1,450 | 0.1 | -30 |
| Construction Laborers, except Carpenters' Helpers | 16,900 | 0.9 | 360 |
| Fishermen and Oystermen | 310 | * | - |
| Freight and Material Handlers | 17,010 | 1.0 | 280 |
| Garbage Collectors | 3,600 | 0.2 | 190 |
| Gardeners and Groundskeepers, except Farm | 6,870 | 0.4 | 20 |
| Longshoremen and Stevedores | 780 | * | 20 |
| Lumbermen, Raftsmen and Woodchoppers | 5,200 | 0.3 | -70 |
| Stock Handlers | 14,380 | 0.8 | 320 |
| Teamsters | 270 | * | -20 |
| Vehicle Washers and Equipment Cleaners | 3,130 | 0.2 | 10 |
| Warehousemen, n.e.c. | 2,750 | 0.1 | 20 |
| Other Laborers, except Farm | 5,020 | 0.3 | 10 |

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| cosmetologists | 13,090 | 0.7 | 390 | 1,950 |
| xcept private household | 3,060 | 0.2 | 120 | 600 |
| apprentices | 40 | * | - | -10 |
| | 90 | * | - | 20 |
| on and amusement | 120 | * | - | -10 |
| aides | 510 | * | 30 | 150 |
| orkers | 23,350 | 1.3 | 900 | 4,500 |
| and bridge tenders | 860 | 0.1 | 30 | 150 |
| tection | 4,790 | 0.3 | 270 | 1,340 |
| hmen | 7,610 | 0.4 | 110 | 550 |
| nstables | 180 | * | 10 | 40 |
| etectives | 8,610 | 0.5 | 410 | 2,070 |
| iffs | 1,300 | 0.1 | 70 | 350 |
| orkers | 46,090 | 2.6 | -850 | -4,260 |
| rs | 4,130 | 0.2 | -70 | -360 |
| ousehold | 1,800 | 0.1 | -20 | -100 |
| rivate household | 2,560 | 0.1 | -40 | -200 |
| vate household | 410 | * | -20 | -90 |
| ts, private household | 37,190 | 2.1 | -700 | -3,510 |
| | 78,990 | 4.4 | 1,140 | 5,660 |
| except Farm | 1,320 | 0.1 | 30 | 140 |
| | 1,450 | 0.1 | -30 | -160 |
| rs, except Carpenters' Helpers | 16,900 | 0.9 | 360 | 1,800 |
| ermen | 310 | * | - | - |
| Handlers | 17,010 | 1.0 | 280 | 1,390 |
| | 3,600 | 0.2 | 190 | 950 |
| ndskeepers, except Farm | 6,870 | 0.4 | 20 | 100 |
| tevedores | 780 | * | 20 | 100 |
| n and Woodchoppers | 5,200 | 0.3 | -70 | -350 |
| | 14,380 | 0.8 | 320 | 1,580 |
| | 270 | * | -20 | -80 |
| Equipment Cleaners | 3,130 | 0.2 | 10 | 50 |
| . | 2,750 | 0.1 | 20 | 90 |
| ept Farm | 5,020 | 0.3 | 10 | 50 |

## TABLE 4 - continued

## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| Occupational Title | Interpolated 1975 Employment<br>Number 2/ | <br>Percent of Total 3/ | Change Fro<br>1976 2/ |
|---|---|---|---|
| Farmers and Farm Workers | 48,310 | 2.7 | -1,770 |
| Farmers and Farm Managers | 23,160 | 1.3 | -780 |
| Farmers (owners and tenants) | 21,520 | 1.2 | -840 |
| Farm managers | 1,640 | 0.1 | 60 |
| Farm Laborers and Farm Foremen | 25,150 | 1.4 | -990 |
| Farm foremen | 690 | * | -10 |
| Farm laborers, wage workers | 23,200 | 1.3 | -940 |
| Farm laborers, unpaid family workers | 1,170 | 0.1 | -40 |
| Farm service laborers, self-employed | 90 | * | - |

1/ Occupational employment levels for 1975 and the change from 1975 to 1976 and 1980 are the result of simple interpolations of the projecte (1970-1980) labor market trend and should not be interpreted as representing cyclical fluctuations in the economy. (See Table 3 for 1970 1980 occupational employment levels.)

2/ Estimates were rounded to tens.

3/ Percents were computed from unrounded data and may not add to 100.0

"n.e.c." denotes "not elsewhere classified."

*Denotes "less than 0.05 percent.

" - " denotes "zero."

## TABLE 4 - continued
## GEORGIA OCCUPATIONAL EMPLOYMENT INTERPOLATED TO 1975 AND CHANGE TO 1976 AND 1980 1/

| | Interpolated 1975 Employment | | Change From 1975 To: – | |
|---|---|---|---|---|
| | Number 2/ | Percent of Total 3/ | 1976 2/ | 1980 2/ |
| rs | 48,310 | 2.7 | -1,770 | -8,810 |
| nagers | 23,160 | 1.3 | -780 | -3,900 |
| nd tenants) | 21,520 | 1.2 | -840 | -4,200 |
| | 1,640 | 0.1 | 60 | 300 |
| arm Foremen | 25,150 | 1.4 | -990 | -4,910 |
| | 690 | * | -10 | -40 |
| ge workers | 23,200 | 1.3 | -940 | -4,680 |
| aid family workers | 1,170 | 0.1 | -40 | -200 |
| ers, self-employed | 90 | * | - | 10 |

yment levels for 1975 and the change from 1975 to 1976 and 1980 are the result of simple interpolations of the projected long-run arket trend and should not be interpreted as representing cyclical fluctuations in the economy. (See Table 3 for 1970 and projected mployment levels.)

led to tens.

uted from unrounded data and may not add to 100.0

lsewhere classified."

5 percent.

## TABLE 5
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| Occupational Title | Estimated 1976 Employment 1/ Number 3/ | Estimated 1976 Employment 1/ Percent of Total 4/ | Total Job Openings, 1976 2/ Number 3/ | Total Job Openings, 1976 2/ Percent of Total 4/ | Total Job Openings, 1976 2/ Percent of Employment 4/ | Ope Growth |
|---|---|---|---|---|---|---|
| Total, All Occupations | 1,827,910 | 100.0 | 104,950 | 100.0 | 5.7 | 39,99 |
| Professional, Technical and Kindred Workers | 241,480 | 13.2 | 15,680 | 14.9 | 6.5 | 7,00 |
| Engineers, Technical | 21,270 | 1.2 | 780 | 0.7 | 3.7 | 48 |
| Aeronautical and astronautical | 2,170 | 0.1 | -10 | * | 0.4 | -3 |
| Chemical | 600 | * | 20 | * | 3.2 | 1 |
| Civil | 4,480 | 0.3 | 200 | 0.2 | 4.4 | 12 |
| Electrical and electronic | 4,130 | 0.2 | 160 | 0.2 | 4.0 | 11 |
| Industrial | 3,700 | 0.2 | 140 | 0.1 | 3.7 | 9 |
| Mechanical | 1,930 | 0.1 | 70 | 0.1 | 3.5 | 4 |
| Metallurgical and materials | 220 | * | 10 | * | 4.5 | 1 |
| Mining | 10 | * | - | * | * | |
| Petroleum | 30 | * | - | * | * | |
| Sales | 1,370 | 0.1 | 70 | 0.1 | 5.0 | 5 |
| Other engineers | 2,630 | 0.1 | 120 | 0.1 | 4.5 | 8 |
| Life and Physical Scientists | 3,010 | 0.2 | 120 | 0.1 | 4.1 | 7 |
| Agricultural | 390 | * | 20 | * | 3.4 | 1 |
| Atmospheric and space | 110 | * | - | * | 3.6 | |
| Biological | 740 | * | 40 | * | 4.8 | 2 |
| Chemists | 1,500 | 0.1 | 60 | 0.1 | 4.3 | 4 |
| Geologists | 90 | * | - | * | 3.3 | |
| Marine | 60 | * | - | * | 3.5 | |
| Physicists and astronomers | 80 | * | - | * | 1.2 | |
| Life and physical scientists, n.e.c. | 40 | * | - | * | * | |
| Mathematical Specialists | 590 | * | 30 | * | 5.6 | 1 |
| Actuaries | 120 | * | - | * | 3.3 | |
| Mathematicians | 40 | * | - | * | 2.4 | |
| Statisticians | 430 | * | 30 | * | 6.3 | 1 |
| Engineering and Science Technicians | 16,440 | 0.9 | 840 | 0.8 | 5.1 | 60 |
| Agriculture and biological technicians, except health | 930 | 0.1 | 60 | 0.1 | 6.3 | 4 |
| Chemical technicians | 950 | 0.1 | 40 | * | 4.3 | 2 |
| Draftsmen | 4,860 | 0.3 | 240 | 0.2 | 5.0 | 1 |
| Electrical and electronic technicians | 2,500 | 0.1 | 90 | 0.1 | 3.6 | 7 |
| Industrial engineering technicians | 500 | * | 10 | * | 1.0 | |
| Mathematical technicians | 10 | * | - | * | * | |

## TABLE 5
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| | 1,827,910 | 100.0 | 104,950 | 100.0 | 5.7 | 39,990 | 64,960 |
| and Kindred Workers | 241,480 | 13.2 | 15,680 | 14.9 | 6.5 | 7,000 | 8,680 |
| | 21,270 | 1.2 | 780 | 0.7 | 3.7 | 480 | 300 |
| stronautical | 2,170 | 0.1 | -10 | * | 0.4 | -30 | 20 |
| | 600 | * | 20 | * | 3.2 | 10 | 10 |
| | 4,480 | 0.3 | 200 | 0.2 | 4.4 | 120 | 80 |
| tronic | 4,130 | 0.2 | 160 | 0.2 | 4.0 | 110 | 50 |
| | 3,700 | 0.2 | 140 | 0.1 | 3.7 | 90 | 50 |
| | 1,930 | 0.1 | 70 | 0.1 | 3.5 | 40 | 30 |
| aterials | 220 | * | 10 | * | 4.5 | 10 | - |
| | 10 | * | - | * | * | - | - |
| | 30 | * | - | * | * | - | - |
| | 1,370 | 0.1 | 70 | 0.1 | 5.0 | 50 | 20 |
| | 2,630 | 0.1 | 120 | 0.1 | 4.5 | 80 | 40 |
| entists | 3,010 | 0.2 | 120 | 0.1 | 4.1 | 70 | 50 |
| | 390 | * | 20 | * | 3.4 | 10 | 10 |
| ace | 110 | * | - | * | 3.6 | - | - |
| | 740 | * | 40 | * | 4.8 | 20 | 20 |
| | 1,500 | 0.1 | 60 | 0.1 | 4.3 | 40 | 20 |
| | 90 | * | - | * | 3.3 | - | - |
| | 60 | * | - | * | 3.5 | - | - |
| onomers | 80 | * | - | * | 1.2 | - | - |
| cientists, n.e.c. | 40 | * | - | * | * | - | - |
| ts | 590 | * | 30 | * | 5.6 | 10 | 20 |
| | 120 | * | - | * | 3.3 | - | - |
| | 40 | * | - | * | 2.4 | - | - |
| | 430 | * | 30 | * | 6.3 | 10 | 20 |
| ce Technicians | 16,440 | 0.9 | 840 | 0.8 | 5.1 | 600 | 240 |
| logical technicians, except health | 930 | 0.1 | 60 | 0.1 | 6.3 | 40 | 20 |
| ns | 950 | 0.1 | 40 | * | 4.3 | 20 | 20 |
| | 4,860 | 0.3 | 240 | 0.2 | 5.0 | 180 | 60 |
| ronic technicians | 2,500 | 0.1 | 90 | 0.1 | 3.6 | 70 | 20 |
| ng technicians | 500 | * | 10 | * | 1.0 | - | 10 |
| icians | 10 | * | - | * | * | - | - |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| Occupational Title | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | |
|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ |
| Mechanical engineering technicians | 130 | * | - | * | * |
| Surveyors | 1,950 | 0.1 | 80 | 0.1 | 4.2 |
| Engineering and science technicians, n.e.c. | 4,610 | 0.3 | 320 | 0.3 | 7.0 |
| Medical and Health Workers, except Technicians | 32,050 | 1.8 | 2,450 | 2.3 | 7.7 |
| Chiropractors | 330 | * | 20 | * | 6.6 |
| Dentists | 1,960 | 0.1 | 140 | 0.1 | 7.3 |
| Dietitians | 1,340 | 0.1 | 120 | 0.1 | 8.6 |
| Optometrists | 350 | * | 20 | * | 6.5 |
| Pharmacists | 2,610 | 0.1 | 130 | 0.1 | 5.0 |
| Physicians, medical and osteopathic | 5,540 | 0.3 | 300 | 0.3 | 5.3 |
| Podiatrists | 70 | * | - | * | 4.6 |
| Registered nurses | 17,350 | 1.0 | 1,480 | 1.4 | 8.5 |
| Therapists | 1,460 | 0.1 | 140 | 0.1 | 9.5 |
| Veterinarians | 1,020 | 0.1 | 100 | 0.1 | 9.9 |
| Other medical and health | 20 | * | - | * | 8.1 |
| Health Technologists and Technicians | 7,640 | 0.4 | 760 | 0.7 | 9.9 |
| Clinical lab technologists and technicians | 3,350 | 0.2 | 330 | 0.3 | 9.7 |
| Dental hygienists | 850 | 0.1 | 100 | 0.1 | 12.3 |
| Health record technologists and technicians | 420 | * | 60 | 0.1 | 13.4 |
| Radiologic technologists and technicians | 1,190 | 0.1 | 110 | 0.1 | 9.1 |
| Therapy assistants | 90 | * | 10 | * | 7.9 |
| Other health technologists and technicians | 1,740 | 0.1 | 150 | 0.1 | 8.6 |
| Technicians, except Health, Engineering and Science | 6,640 | 0.4 | 290 | 0.3 | 4.4 |
| Airplane pilots | 2,720 | 0.2 | 100 | 0.1 | 3.5 |
| Air traffic controllers | 1,160 | 0.1 | 20 | * | 2.3 |
| Embalmers | 150 | * | - | * | * |
| Flight engineers | 420 | * | 20 | * | 3.8 |
| Radio operators | 790 | * | 50 | 0.1 | 6.4 |
| Tool programmers, numerical control | 40 | * | - | * | * |
| Technicians, n.e.c. | 1,360 | 0.1 | 100 | 0.1 | 7.3 |
| Computer Specialists | 4,290 | 0.2 | 220 | 0.2 | 5.1 |
| Computer programmers | 2,810 | 0.2 | 140 | 0.1 | 4.9 |
| Computer systems analysts | 1,240 | 0.1 | 70 | 0.1 | 5.4 |
| Computer specialists, n.e.c. | 240 | * | 10 | * | 4.9 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| neering technicians | 130 | * | - | * | * | - | - |
| | 1,950 | 0.1 | 80 | 0.1 | 4.2 | 60 | 20 |
| science technicians, n.e.c. | 4,610 | 0.3 | 320 | 0.3 | 7.0 | 230 | 90 |
| Workers, except Technicians | 32,050 | 1.8 | 2,450 | 2.3 | 7.7 | 960 | 1,490 |
| | 330 | * | 20 | * | 6.6 | 20 | - |
| | 1,960 | 0.1 | 140 | 0.1 | 7.3 | 80 | 60 |
| | 1,340 | 0.1 | 120 | 0.1 | 8.6 | 40 | 80 |
| | 350 | * | 20 | * | 6.5 | 10 | 10 |
| | 2,610 | 0.1 | 130 | 0.1 | 5.0 | 50 | 80 |
| lical and osteopathic | 5,540 | 0.3 | 300 | 0.3 | 5.3 | 160 | 140 |
| | 70 | * | - | * | 4.6 | - | - |
| es | 17,350 | 1.0 | 1,480 | 1.4 | 8.5 | 450 | 1,030 |
| | 1,460 | 0.1 | 140 | 0.1 | 9.5 | 70 | 70 |
| | 1,020 | 0.1 | 100 | 0.1 | 9.9 | 80 | 20 |
| d health | 20 | * | - | * | 8.1 | - | - |
| s and Technicians | 7,640 | 0.4 | 760 | 0.7 | 9.9 | 390 | 370 |
| nologists and technicians | 3,350 | 0.2 | 330 | 0.3 | 9.7 | 160 | 170 |
| s | 850 | 0.1 | 100 | 0.1 | 12.3 | 60 | 40 |
| chnologists and technicians | 420 | * | 60 | 0.1 | 13.4 | 30 | 30 |
| ologists and technicians | 1,190 | 0.1 | 110 | 0.1 | 9.1 | 40 | 70 |
| ts | 90 | * | 10 | * | 7.9 | 10 | - |
| nologists and technicians | 1,740 | 0.1 | 150 | 0.1 | 8.6 | 90 | 60 |
| Health, Engineering and Science | 6,640 | 0.4 | 290 | 0.3 | 4.4 | 220 | 70 |
| | 2,720 | 0.2 | 100 | 0.1 | 3.5 | 80 | 20 |
| llers | 1,160 | 0.1 | 20 | * | 2.3 | 10 | 10 |
| | 150 | * | - | * | * | - | - |
| | 420 | * | 20 | * | 3.8 | 20 | - |
| | 790 | * | 50 | 0.1 | 6.4 | 30 | 20 |
| , numerical control | 40 | * | - | * | * | - | - |
| .c. | 1,360 | 0.1 | 100 | 0.1 | 7.3 | 80 | 20 |
| s | 4,290 | 0.2 | 220 | 0.2 | 5.1 | 130 | 90 |
| mers | 2,810 | 0.2 | 140 | 0.1 | 4.9 | 80 | 60 |
| s analysts | 1,240 | 0.1 | 70 | 0.1 | 5.4 | 40 | 30 |
| lists, n.e.c. | 240 | * | 10 | * | 4.9 | 10 | - |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND
## JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Open |
|---|---|---|---|---|---|---|
| Occupational Title | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4 |
| **Social Scientists** | 2,130 | 0.1 | 150 | 0.1 | 6.9 | 110 |
| Economists | 1,270 | 0.1 | 80 | 0.1 | 5.9 | 60 |
| Political scientists | 20 | * | - | * | * | - |
| Psychologists | 350 | * | 30 | * | 8.3 | 20 |
| Sociologists | 50 | * | - | * | 4.3 | - |
| Urban and regional planners | 360 | * | 40 | * | 8.9 | 30 |
| Social scientists, n.e.c. | 80 | * | - | * | 7.2 | - |
| | | | | | | |
| **Teachers** | 75,520 | 4.1 | 5,430 | 5.2 | 7.2 | 1,720 |
| Adult education teachers | 1,530 | 0.1 | 70 | 0.1 | 4.6 | 20 |
| Agriculture teachers | 130 | * | - | * | 3.8 | - |
| Art, drama, music teachers | 510 | * | 30 | * | 4.9 | 20 |
| Atmospheric, earth, marine | 100 | * | - | * | 5.2 | - |
| Biology teachers | 460 | * | 30 | * | 6.1 | 20 |
| Business, commerce teachers | 300 | * | 20 | * | 5.6 | 10 |
| Chemistry teachers | 270 | * | - | * | 1.9 | - |
| Coaches, physical education | 320 | * | 10 | * | 4.1 | - |
| Economics teachers | 240 | * | 10 | * | 3.8 | 10 |
| Education teachers | 100 | * | - | * | 2.0 | - |
| Elementary school teachers | 36,560 | 2.0 | 3,000 | 2.9 | 8.2 | 850 |
| Engineering teachers | 220 | * | - | * | 2.7 | - |
| English teachers | 660 | * | 30 | * | 4.4 | 10 |
| Foreign language teachers | 440 | * | 40 | * | 7.6 | 20 |
| Health specialties teachers | 880 | 0.1 | 80 | 0.1 | 8.7 | 50 |
| History teachers | 330 | * | 10 | * | 2.1 | - |
| Home economics teachers | 110 | * | 10 | * | 8.2 | - |
| Law teachers | 110 | * | 10 | * | 5.7 | 10 |
| Mathematics teachers | 620 | * | 40 | * | 6.3 | 20 |
| Physics teachers | 200 | * | - | * | 0.5 | - |
| Preschool, kindergarten teachers | 4,060 | 0.2 | 320 | 0.3 | 8.0 | 120 |
| Psychology teachers | 390 | * | 30 | * | 6.6 | 20 |
| Secondary school teachers | 19,240 | 1.1 | 1,160 | 1.1 | 6.0 | 300 |
| Sociology teachers | 190 | * | 20 | * | 8.9 | 10 |
| Social Science teachers, n.e.c. | 260 | * | 10 | * | 5.4 | 10 |
| Miscellaneous ,college and university | 430 | * | 30 | * | 6.5 | 20 |
| College, university, n.e.c. | 3,390 | 0.2 | 230 | 0.2 | 6.9 | 130 |
| Theology teachers | 90 | * | 10 | * | 6.9 | 10 |
| Trade, industrial teachers | 90 | * | 10 | * | 6.7 | 10 |
| Teachers, n.e.c., except college, university | 3,290 | 0.2 | 220 | 0.2 | 6.6 | 50 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| | 2,130 | 0.1 | 150 | 0.1 | 6.9 | 110 | 40 |
| | 1,270 | 0.1 | 80 | 0.1 | 5.9 | 60 | 20 |
| s | 20 | * | - | * | * | - | - |
| | 350 | * | 30 | * | 8.3 | 20 | 10 |
| | 50 | * | - | * | 4.3 | - | - |
| planners | 360 | * | 40 | * | 8.9 | 30 | 10 |
| n.e.c. | 90 | * | - | * | 7.2 | - | - |
| | | | | | | | |
| | 75,520 | 4.1 | 5,430 | 5.2 | 7.2 | 1,720 | 3,710 |
| achers | 1,530 | 0.1 | 70 | 0.1 | 4.6 | 20 | 50 |
| rs | 130 | * | - | * | 3.8 | - | - |
| teachers | 510 | * | 30 | * | 4.9 | 20 | 10 |
| , marine | 100 | * | - | * | 5.2 | - | - |
| | 460 | * | 30 | * | 6.1 | 20 | 10 |
| ce teachers | 300 | * | 20 | * | 5.6 | 10 | 10 |
| s | 270 | * | - | * | 1.9 | - | - |
| education | 320 | * | 10 | * | 4.1 | - | 10 |
| s | 240 | * | 10 | * | 3.8 | 10 | - |
| s | 100 | * | - | * | 2.0 | - | - |
| teachers | 36,560 | 2.0 | 3,000 | 2.9 | 8.2 | 850 | 2,150 |
| ers | 220 | * | - | * | 2.7 | - | - |
| | 660 | * | 30 | * | 4.4 | 10 | 20 |
| eachers | 440 | * | 40 | * | 7.6 | 20 | 20 |
| teachers | 880 | 0.1 | 80 | 0.1 | 8.7 | 50 | 30 |
| | 330 | * | 10 | * | 2.1 | - | 10 |
| eachers | 110 | * | 10 | * | 8.2 | - | 10 |
| | 110 | * | 10 | * | 5.7 | 10 | - |
| ers | 620 | * | 40 | * | 6.3 | 20 | 20 |
| | 200 | * | - | * | 0.5 | - | - |
| arten teachers | 4,060 | 0.2 | 320 | 0.3 | 8.0 | 120 | 200 |
| rs | 390 | * | 30 | * | 6.6 | 20 | 10 |
| eachers | 19,240 | 1.1 | 1,160 | 1.1 | 6.0 | 300 | 860 |
| | 190 | * | 20 | * | 8.9 | 10 | 10 |
| chers, n.e.c. | 260 | * | 10 | * | 5.4 | 10 | - |
| lege and university | 430 | * | 30 | * | 6.5 | 20 | 10 |
| , n.e.c. | 3,390 | 0.2 | 230 | 0.2 | 6.9 | 130 | 100 |
| | 90 | * | 10 | * | 6.9 | 10 | - |
| eachers | 90 | * | 10 | * | 6.7 | 10 | - |
| except college, university | 3,290 | 0.2 | 220 | 0.2 | 6.6 | 50 | 170 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| Occupational Title | Estimated 1976 Employment 1/ |  | Total Job Openings, 1976 2/ |  |  |
|---|---|---|---|---|---|
|  | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ |
| Writers, Artists and Entertainers | 13,330 | 0.7 | 790 | 0.8 | 5.9 |
| Actors | 70 | * | - | * | 2.7 |
| Athletes and kindred workers | 1,130 | 0.1 | 70 | 0.1 | 5.9 |
| Authors | 220 | * | 10 | * | 4.0 |
| Dancers | 110 | * | 10 | * | 9.7 |
| Designers | 1,470 | 0.1 | 100 | 0.1 | 6.2 |
| Editors and reporters | 2,360 | 0.1 | 170 | 0.2 | 7.4 |
| Musicians and composers | 1,690 | 0.1 | 80 | 0.1 | 5.0 |
| Painters and sculptors | 1,760 | 0.1 | 110 | 0.1 | 6.0 |
| Photographers | 1,320 | 0.1 | 70 | 0.1 | 4.9 |
| Public relations men and publicity writers | 1,560 | 0.1 | 100 | 0.1 | 6.7 |
| Radio and television announcers | 700 | * | 10 | * | 2.0 |
| Writers, artists, and entertainers, n.e.c. | 940 | 0.1 | 60 | 0.1 | 6.5 |
| Other Professional, Technical and Kindred Workers | 58,570 | 3.2 | 3,820 | 3.6 | 6.5 |
| Accountants | 16,310 | 0.9 | 920 | 0.9 | 5.7 |
| Architects | 1,420 | 0.1 | 90 | 0.1 | 6.0 |
| Archivists and curators | 80 | * | - | * | 2.5 |
| Clergymen | 6,870 | 0.4 | 400 | 0.4 | 5.8 |
| Religious workers, except clergymen | 870 | 0.1 | 70 | 0.1 | 7.9 |
| Farm management advisors | 270 | * | - | * | * |
| Foresters and conservationists | 2,210 | 0.1 | 100 | 0.1 | 4.4 |
| Home management advisors | 190 | * | 10 | * | 5.9 |
| Judges | 280 | * | 20 | * | 6.7 |
| Lawyers | 4,940 | 0.3 | 290 | 0.3 | 5.8 |
| Librarians | 3,250 | 0.2 | 280 | 0.3 | 8.6 |
| Operations and systems researchers and analysts | 1,690 | 0.1 | 90 | 0.1 | 5.3 |
| Personnel and labor relations workers | 8,340 | 0.5 | 580 | 0.6 | 6.9 |
| Research workers, n.e.c. | 2,440 | 0.1 | 150 | 0.1 | 6.2 |
| Recreation workers | 1,290 | 0.1 | 90 | 0.1 | 7.1 |
| Social workers | 5,100 | 0.3 | 450 | 0.4 | 8.8 |
| Vocational and educational counselors | 3,020 | 0.2 | 280 | 0.3 | 9.3 |
| Managers, Officials and Proprietors, except Farm | 177,890 | 9.7 | 10,880 | 10.4 | 6.1 |
| Buyers, Sales and Loan Managers | 33,500 | 1.8 | 1,970 | 1.9 | 5.9 |
| Bank and financial managers | 10,110 | 0.6 | 660 | 0.6 | 6.6 |
| Buyers and shippers, farm products | 220 | * | 10 | * | 3.2 |
| Buyers, wholesale and retail trade | 3,710 | 0.2 | 250 | 0.2 | 6.7 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: - | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| d Entertainers | 13,330 | 0.7 | 790 | 0.8 | 5.9 | 390 | 400 |
| | 70 | * | - | * | 2.7 | - | - |
| ndred workers | 1,130 | 0.1 | 70 | 0.1 | 5.9 | 40 | 30 |
| | 220 | * | 10 | * | 4.0 | - | 10 |
| | 110 | * | 10 | * | 9.7 | - | 10 |
| | 1,470 | 0.1 | 100 | 0.1 | 6.2 | 50 | 50 |
| orters | 2,360 | 0.1 | 170 | 0.2 | 7.4 | 80 | 90 |
| composers | 1,690 | 0.1 | 80 | 0.1 | 5.0 | 40 | 40 |
| ulptors | 1,760 | 0.1 | 110 | 0.1 | 6.0 | 40 | 70 |
| | 1,320 | 0.1 | 70 | 0.1 | 4.9 | 40 | 30 |
| men and publicity writers | 1,560 | 0.1 | 100 | 0.1 | 6.7 | 50 | 50 |
| ision announcers | 700 | * | 10 | * | 2.0 | 10 | - |
| and entertainers, n.e.c. | 940 | 0.1 | 60 | 0.1 | 6.5 | 40 | 20 |
| Technical and Kindred Workers | 58,570 | 3.2 | 3,820 | 3.6 | 6.5 | 1,920 | 1,900 |
| | 16,310 | 0.9 | 920 | 0.9 | 5.7 | 400 | 520 |
| | 1,420 | 0.1 | 90 | 0.1 | 6.0 | 60 | 30 |
| curators | 80 | * | - | * | 2.5 | - | - |
| | 6,870 | 0.4 | 400 | 0.4 | 5.8 | 190 | 210 |
| rs, except clergymen | 870 | 0.1 | 70 | 0.1 | 7.9 | 20 | 50 |
| nt advisors | 270 | * | - | * | * | - | - |
| onservationists | 2,210 | 0.1 | 100 | 0.1 | 4.4 | 60 | 40 |
| nt advisors | 190 | * | 10 | * | 5.9 | - | 10 |
| | 280 | * | 20 | * | 6.7 | 10 | 10 |
| | 4,940 | 0.3 | 290 | 0.3 | 5.8 | 140 | 150 |
| | 3,250 | 0.2 | 280 | 0.3 | 8.6 | 100 | 180 |
| ystems researchers and analysts | 1,690 | 0.1 | 90 | 0.1 | 5.3 | 70 | 20 |
| bor relations workers | 8,340 | 0.5 | 380 | 0.6 | 6.9 | 360 | 220 |
| s, n.e.c. | 2,440 | 0.1 | 150 | 0.1 | 6.2 | 90 | 60 |
| ers | 1,290 | 0.1 | 90 | 0.1 | 7.1 | 50 | 40 |
| | 5,100 | 0.3 | 450 | 0.4 | 8.8 | 190 | 260 |
| ducational counselors | 3,020 | 0.2 | 280 | 0.3 | 9.3 | 180 | 100 |
| d Proprietors, except Farm | 177,890 | 9.7 | 10,880 | 10.4 | 6.1 | 6,040 | 4,840 |
| Loan Managers | 33,500 | 1.8 | 1,970 | 1.9 | 5.9 | 1,250 | 720 |
| ial managers | 10,110 | 0.6 | 660 | 0.6 | 6.6 | 450 | 210 |
| ers, farm products | 220 | * | 10 | * | 3.2 | - | 10 |
| le and retail trade | 3,710 | 0.2 | 250 | 0.2 | 6.7 | 130 | 120 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Ope |
|---|---|---|---|---|---|---|
| Occupational Title | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth |
| Creditmen | 1,870 | 0.1 | 100 | 0.1 | 5.5 | 50 |
| Purchasing agents and buyers, n.e.c. | 3,420 | 0.2 | 170 | 0.2 | 4.8 | 90 |
| Sales managers and department heads, retail trade | 5,640 | 0.3 | 340 | 0.3 | 6.1 | 220 |
| Sales managers, except retail trade | 8,530 | 0.5 | 440 | 0.4 | 5.2 | 310 |
| Administrators and Inspectors; public administration | 17,710 | 1.0 | 1,040 | 1.0 | 5.9 | 470 |
| Assessors, controllers and treasurers; local public administration | 650 | * | 60 | 0.1 | 8.7 | 30 |
| Construction inspectors; public administration | 470 | * | 30 | * | 6.6 | 20 |
| Health administrators | 1,990 | 0.1 | 150 | 0.1 | 7.7 | 90 |
| Inspectors, except construction; public administration | 2,400 | 0.1 | 140 | 0.1 | 5.6 | 70 |
| Officials and administrators; public admn., n.e.c. | 6,280 | 0.3 | 260 | 0.3 | 4.2 | 70 |
| Postmasters and mail superintendents | 540 | * | 20 | * | 4.1 | -10 |
| School administrators, college | 1,050 | 0.1 | 90 | 0.1 | 8.8 | 50 |
| School administrators, elementary and secondary | 4,330 | 0.2 | 290 | 0.3 | 6.6 | 150 |
| Other Managers, Officials and Proprietors | 126,680 | 6.9 | 7,870 | 7.5 | 6.2 | 4,320 |
| Funeral directors | 1,110 | 0.1 | 70 | 0.1 | 5.9 | 30 |
| Managers and superintendents, building | 1,880 | 0.1 | 160 | 0.2 | 8.4 | 60 |
| Office managers, n.e.c. | 6,670 | 0.4 | 490 | 0.5 | 7.4 | 300 |
| Officers, pilots and pursers; ship | 230 | * | 10 | * | 3.8 | - |
| Officials of lodges, societies and unions | 1,020 | 0.1 | 60 | 0.1 | 5.4 | 30 |
| Railroads conductors | 1,010 | 0.1 | 50 | 0.1 | 4.8 | 20 |
| Restaurant, cafeteria and bar managers | 8,250 | 0.5 | 500 | 0.5 | 6.1 | 220 |
| Other managers and administrators | 106,510 | 5.8 | 6,530 | 6.2 | 6.1 | 3,660 |
| Sales Workers | 135,910 | 7.4 | 8,470 | 8.1 | 6.2 | 3,630 |
| Advertising Agents and Salesmen | 1,350 | 0.1 | 90 | 0.1 | 6.5 | 50 |
| Auctioneers | 80 | * | - | * | 3.8 | - |
| Demonstrators | 900 | 0.1 | 70 | 0.1 | 7.2 | 20 |
| Hucksters and Peddlers | 2,500 | 0.1 | 200 | 0.2 | 8.1 | 70 |
| Insurance Agents, Brokers and Underwriters | 14,590 | 0.8 | 640 | 0.6 | 4.4 | 320 |
| Newsboys | 990 | 0.1 | 30 | * | 2.8 | - |
| Real Estate Agents and Brokers | 5,990 | 0.3 | 330 | 0.3 | 5.5 | 110 |
| Stock and Bond Salesmen | 2,000 | 0.1 | 150 | 0.1 | 7.4 | 100 |
| Sales Representatives, manufacturing industries | 12,220 | 0.7 | 590 | 0.6 | 4.8 | 360 |
| Sales Representatives, wholesale trade | 19,840 | 1.1 | 1,060 | 1.0 | 5.4 | 680 |
| Sales Clerks, retail trade | 57,140 | 3.1 | 4,370 | 4.2 | 7.7 | 1,460 |
| Salesmen, retail trade | 12,350 | 0.7 | 570 | 0.5 | 4.6 | 270 |
| Salesmen of Services and Construction | 5,960 | 0.3 | 370 | 0.4 | 6.2 | 190 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: — | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| | 1,870 | 0.1 | 100 | 0.1 | 5.5 | 50 | 50 |
| gents and buyers, n.e.c. | 3,420 | 0.2 | 170 | 0.2 | 4.8 | 90 | 80 |
| rs and department heads, retail trade | 5,640 | 0.3 | 340 | 0.3 | 6.1 | 220 | 120 |
| rs, except retail trade | 8,530 | 0.5 | 440 | 0.4 | 5.2 | 310 | 130 |
| nd Inspectors; public administration | 17,710 | 1.0 | 1,040 | 1.0 | 5.9 | 470 | 570 |
| ontrollers and treasurers; administration | 650 | * | 60 | 0.1 | 8.7 | 30 | 30 |
| inspectors; public administration | 470 | * | 30 | * | 6.6 | 20 | 10 |
| istrators | 1,990 | 0.1 | 150 | 0.1 | 7.7 | 90 | 60 |
| xcept construction; public administration | 2,400 | 0.1 | 140 | 0.1 | 5.6 | 70 | 70 |
| administrators; public admn., n.e.c. | 6,280 | 0.3 | 260 | 0.3 | 4.2 | 70 | 190 |
| and mail superintendents | 540 | * | 20 | * | 4.1 | -10 | 30 |
| istrators, college | 1,050 | 0.1 | 90 | 0.1 | 8.8 | 50 | 40 |
| istrators, elementary and secondary | 4,330 | 0.2 | 290 | 0.3 | 6.6 | 150 | 140 |
| Officials and Proprietors | 126,680 | 6.9 | 7,870 | 7.5 | 6.2 | 4,320 | 3,550 |
| tors | 1,110 | 0.1 | 70 | 0.1 | 5.9 | 30 | 40 |
| superintendents, building | 1,880 | 0.1 | 160 | 0.2 | 8.4 | 60 | 100 |
| ers, n.e.c. | 6,670 | 0.4 | 490 | 0.5 | 7.4 | 300 | 190 |
| ts and pursers; ship | 230 | * | 10 | * | 3.8 | - | 10 |
| odges, societies and unions | 1,020 | 0.1 | 60 | 0.1 | 5.4 | 30 | 30 |
| ductors | 1,010 | 0.1 | 50 | 0.1 | 4.8 | 20 | 30 |
| afeteria and bar managers | 8,250 | 0.5 | 500 | 0.5 | 6.1 | 220 | 280 |
| rs and administrators | 106,510 | 5.8 | 6,530 | 6.2 | 6.1 | 3,660 | 2,870 |
| | 135,910 | 7.4 | 8,470 | 8.1 | 6.2 | 3,630 | 4,840 |
| nts and Salesmen | 1,350 | 0.1 | 90 | 0.1 | 6.5 | 50 | 40 |
| | 80 | * | - | * | 3.8 | - | - |
| | 900 | 0.1 | 70 | 0.1 | 7.2 | 20 | 50 |
| eddlers | 2,500 | 0.1 | 200 | 0.2 | 8.1 | 70 | 130 |
| , Brokers and Underwriters | 14,590 | 0.8 | 640 | 0.6 | 4.4 | 320 | 320 |
| | 990 | 0.1 | 30 | * | 2.8 | - | 30 |
| nts and Brokers | 5,990 | 0.3 | 330 | 0.3 | 5.5 | 110 | 220 |
| alesmen | 2,000 | 0.1 | 150 | 0.1 | 7.4 | 100 | 50 |
| tives, manufacturing industries | 12,220 | 0.7 | 590 | 0.6 | 4.8 | 360 | 230 |
| tives, wholesale trade | 19,840 | 1.1 | 1,060 | 1.0 | 5.4 | 680 | 380 |
| ail trade | 57,140 | 3.1 | 4,370 | 4.2 | 7.7 | 1,460 | 2,910 |
| rade | 12,350 | 0.7 | 570 | 0.5 | 4.6 | 270 | 300 |
| ices and Construction | 5,960 | 0.3 | 370 | 0.4 | 6.2 | 190 | 180 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Op |
|---|---|---|---|---|---|---|
| Occupational Title | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth |
| **Clerical and Kindred Workers** | 298,150 | 16.3 | 23,640 | 22.5 | 7.9 | 8,070 |
| Stenographers, Typists and Secretaries | 92,010 | 5.0 | 9,140 | 8.7 | 9.9 | 3,070 |
| Secretaries, legal | 1,400 | 0.1 | 140 | 0.1 | 10.0 | 60 |
| Secretaries, medical | 1,470 | 0.1 | 170 | 0.2 | 11.4 | 70 |
| Secretaries, other | 67,660 | 3.7 | 6,860 | 6.5 | 10.2 | 2,510 |
| Stenographers | 2,140 | 0.1 | 90 | 0.1 | 4.1 | -70 |
| Typists | 19,340 | 1.1 | 1,880 | 1.8 | 9.7 | 500 |
| Office Machine Operators | 10,680 | 0.6 | 660 | 0.6 | 6.2 | 110 |
| Bookkeeping and billing machine | 1,140 | 0.1 | 100 | 0.1 | 9.0 | 30 |
| Calculating machine | 540 | * | 30 | * | 6.1 | - |
| Computer and peripheral equipment | 2,760 | 0.2 | 190 | 0.2 | 6.7 | 120 |
| Duplicating machine | 310 | * | 20 | * | 6.7 | 10 |
| Keypunch | 5,210 | 0.3 | 260 | 0.3 | 5.0 | -80 |
| Tabulating machine | 70 | * | - | * | 2.8 | - |
| Other office machine operators | 650 | * | 60 | 0.1 | 8.4 | 30 |
| Other Clerical Workers | 195,460 | 10.7 | 13,840 | 13.2 | 7.1 | 4,890 |
| Bank tellers | 6,010 | 0.3 | 590 | 0.6 | 9.8 | 230 |
| Billing clerks | 3,220 | 0.2 | 330 | 0.3 | 10.1 | 150 |
| Bookkeepers | 37,170 | 2.0 | 2,820 | 2.7 | 7.6 | 820 |
| Cashiers | 20,860 | 1.1 | 1,770 | 1.7 | 8.5 | 570 |
| Clerical assistants, social welfare | 40 | * | - | * | 10.1 | - |
| Clerical supervisors, n.e.c. | 3,360 | 0.2 | 180 | 0.2 | 5.4 | 80 |
| Collectors, bill and account | 1,880 | 0.1 | 130 | 0.1 | 6.8 | 70 |
| Counter clerks, except food | 6,920 | 0.4 | 620 | 0.6 | 9.0 | 270 |
| Dispatchers and starters, vehicle | 1,370 | 0.1 | 80 | 0.1 | 5.7 | 40 |
| Enumerators and interviewers | 1,770 | 0.1 | 60 | 0.1 | 3.4 | -30 |
| Estimators and investigators, n.e.c. | 6,410 | 0.4 | 460 | 0.4 | 7.2 | 210 |
| Expediters and production controllers | 4,090 | 0.2 | 150 | 0.1 | 3.7 | 60 |
| File clerks | 7,120 | 0.4 | 560 | 0.5 | 7.9 | 120 |
| Insurance adjusters, examiners and investigators | 1,900 | 0.1 | 100 | 0.1 | 5.3 | 50 |
| Library attendants and assistants | 2,430 | 0.1 | 220 | 0.2 | 8.9 | 70 |
| Mail carriers, post office | 4,990 | 0.3 | 100 | 0.1 | 2.0 | 20 |
| Mail handlers, except post office | 2,980 | 0.2 | 200 | 0.2 | 6.6 | 90 |
| Messengers and office boys | 500 | * | 10 | * | 2.6 | - |
| Meter readers, utilities | 990 | 0.1 | 30 | * | 3.1 | 20 |
| Payroll and timekeeping clerks | 4,050 | 0.2 | 310 | 0.3 | 7.8 | 120 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| kers | 298,150 | 16.3 | 23,640 | 22.5 | 7.9 | 8,070 | 15,570 |
| s and Secretaries | 92,010 | 5.0 | 9,140 | 8.7 | 9.9 | 3,070 | 6,070 |
| | 1,400 | 0.1 | 140 | 0.1 | 10.0 | 60 | 80 |
| al | 1,470 | 0.1 | 170 | 0.2 | 11.4 | 70 | 100 |
| | 67,660 | 3.7 | 6,860 | 6.5 | 10.2 | 2,510 | 4,350 |
| | 2,140 | 0.1 | 90 | 0.1 | 4.1 | -70 | 160 |
| | 19,340 | 1.1 | 1,880 | 1.8 | 9.7 | 500 | 1,380 |
| tors | 10,680 | 0.6 | 660 | 0.6 | 6.2 | 110 | 550 |
| illing machine | 1,140 | 0.1 | 100 | 0.1 | 9.0 | 30 | 70 |
| ne | 540 | * | 30 | * | 6.1 | - | 30 |
| pheral equipment | 2,760 | 0.2 | 190 | 0.2 | 6.7 | 120 | 70 |
| ne | 310 | * | 20 | * | 6.7 | 10 | 10 |
| | 5,210 | 0.3 | 260 | 0.3 | 5.0 | -80 | 340 |
| | 70 | * | - | * | 2.8 | - | - |
| ne operators | 650 | * | 60 | 0.1 | 8.4 | 30 | 30 |
| | 195,460 | 10.7 | 13,840 | 13.2 | 7.1 | 4,890 | 8,950 |
| | 6,010 | 0.3 | 590 | 0.6 | 9.8 | 230 | 360 |
| | 3,220 | 0.2 | 330 | 0.3 | 10.1 | 150 | 180 |
| | 37,170 | 2.0 | 2,820 | 2.7 | 7.6 | 820 | 2,000 |
| | 20,860 | 1.1 | 1,770 | 1.7 | 8.5 | 570 | 1,200 |
| , social welfare | 40 | * | - | * | 10.1 | - | - |
| s, n.e.c. | 3,360 | 0.2 | 180 | 0.2 | 5.4 | 80 | 100 |
| d account | 1,880 | 0.1 | 130 | 0.1 | 6.8 | 70 | 60 |
| cept food | 6,920 | 0.4 | 620 | 0.6 | 9.0 | 270 | 350 |
| arters, vehicle | 1,370 | 0.1 | 80 | 0.1 | 5.7 | 40 | 40 |
| terviewers | 1,770 | 0.1 | 60 | 0.1 | 3.4 | -30 | 90 |
| estigators, n.e.c. | 6,410 | 0.4 | 460 | 0.4 | 7.2 | 210 | 250 |
| duction controllers | 4,090 | 0.2 | 150 | 0.1 | 3.7 | 60 | 90 |
| | 7,120 | 0.4 | 560 | 0.5 | 7.9 | 120 | 440 |
| , examiners and investigators | 1,900 | 0.1 | 100 | 0.1 | 5.3 | 50 | 50 |
| and assistants | 2,430 | 0.1 | 220 | 0.2 | 8.9 | 70 | 150 |
| office | 4,990 | 0.3 | 100 | 0.1 | 2.0 | 20 | 80 |
| pt post office | 2,980 | 0.2 | 200 | 0.2 | 6.6 | 90 | 110 |
| ice boys | 500 | * | 10 | | 2.6 | - | 10 |
| ties | 990 | 0.1 | 30 | | 3.1 | 20 | 10 |
| eping clerks | 4,050 | 0.2 | 310 | 0.3 | 7.8 | 120 | 190 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND
## JOB OPENINGS BY OCCUPATION

| Occupational Title | Estimated 1976 Employment 1/ Number 3/ | Estimated 1976 Employment 1/ Percent of Total 4/ | Total Job Openings, 1976 2/ Number 3/ | Total Job Openings, 1976 2/ Percent of Total 4/ | Total Job Openings, 1976 2/ Percent of Employment 4/ | Ope Growth |
|---|---|---|---|---|---|---|
| Postal clerks | 5,330 | 0.3 | 150 | 0.1 | 2.8 | - |
| Proofreaders | 530 | * | 50 | 0.1 | 9.3 | 20 |
| Real estate appraisers | 490 | * | 30 | * | 6.3 | 20 |
| Receptionists | 6,110 | 0.3 | 600 | 0.6 | 9.8 | 170 |
| Shipping and receiving clerks | 13,860 | 0.8 | 570 | 0.5 | 4.1 | 300 |
| Statistical clerks | 5,370 | 0.3 | 380 | 0.4 | 7.0 | 100 |
| Stock clerks and storekeepers | 13,780 | 0.8 | 630 | 0.6 | 4.5 | 300 |
| Teacher aides, except school monitors | 3,380 | 0.2 | 410 | 0.4 | 12.1 | 230 |
| Telegraph messengers | 10 | * | - | * | -7.3 | - |
| Telegraph operators | 230 | * | 10 | * | 3.4 | - |
| Telephone operators | 9,780 | 0.5 | 860 | 0.8 | 8.8 | 140 |
| Ticket, station and express agents | 3,990 | 0.2 | 220 | 0.2 | 5.6 | 100 |
| Weighers | 1,350 | 0.1 | 50 | 0.1 | 3.7 | 10 |
| Miscellaneous clerical workers, n.e.c. | 13,190 | 0.7 | 1,160 | 1.1 | 8.8 | 540 |
| **Craftsmen, Foremen and Kindred Workers** | 263,150 | 14.4 | 10,900 | 10.4 | 4.1 | 6,240 |
| Construction Craftsmen | 86,380 | 4.7 | 4,240 | 4.0 | 4.9 | 2,640 |
| Brickmasons and stonemasons | 7,790 | 0.4 | 370 | 0.4 | 4.8 | 260 |
| Brickmason and stonemason apprentices | 90 | * | - | * | 2.3 | - |
| Bulldozer operators | 4,040 | 0.2 | 170 | 0.2 | 4.3 | 110 |
| Carpenters | 27,040 | 1.5 | 1,430 | 1.4 | 5.3 | 760 |
| Carpenter apprentices | 130 | * | 10 | * | 3.8 | 10 |
| Cement and concrete finishers | 2,400 | 0.1 | 160 | 0.2 | 6.4 | 120 |
| Electricians | 12,650 | 0.7 | 600 | 0.6 | 4.7 | 440 |
| Electrician apprentices | 420 | * | 20 | * | 4.1 | 20 |
| Excavating, grading and road machine operators, except bulldozer | 6,350 | 0.4 | 300 | 0.3 | 4.7 | 190 |
| Floor layers, except tile setters | 890 | 0.1 | 40 | * | 5.3 | 30 |
| Painters, construction and maintenance | 9,300 | 0.5 | 350 | 0.3 | 3.7 | 130 |
| Painter apprentices | 30 | * | - | * | * | - |
| Paperhangers | 290 | * | 20 | * | 6.5 | - |
| Plasterers | 370 | * | 10 | * | 3.5 | 10 |
| Plasterer apprentices | - | * | - | * | * | - |
| Plumbers and pipefitters | 8,970 | 0.5 | 470 | 0.4 | 5.2 | 320 |
| Plumber and pipefitter apprentices | 310 | * | 10 | * | 4.2 | 10 |
| Roofers and slaters | 2,440 | 0.1 | 150 | 0.1 | 6.1 | 120 |
| Structural metal craftsmen | 1,660 | 0.1 | 90 | 0.1 | 5.5 | 70 |
| Tile setters | 1,210 | 0.1 | 40 | * | 3.4 | 30 |

# TABLE 5 - continued
# GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| | 5,330 | 0.3 | 150 | 0.1 | 2.8 | - | 150 |
| | 530 | * | 50 | 0.1 | 9.3 | 20 | 30 |
| isers | 490 | * | 30 | * | 6.3 | 20 | 10 |
| | 6,110 | 0.3 | 600 | 0.6 | 9.8 | 170 | 430 |
| iving clerks | 13,860 | 0.8 | 570 | 0.5 | 4.1 | 300 | 270 |
| | 5,370 | 0.3 | 380 | 0.4 | 7.0 | 100 | 280 |
| storekeepers | 13,780 | 0.8 | 630 | 0.6 | 4.5 | 300 | 330 |
| xcept school monitors | 3,380 | 0.2 | 410 | 0.4 | 12.1 | 230 | 180 |
| ngers | 10 | * | - | * | -7.3 | - | - |
| ors | 230 | * | 10 | * | 3.4 | - | 10 |
| ors | 9,780 | 0.5 | 860 | 0.8 | 8.8 | 140 | 720 |
| nd express agents | 3,990 | 0.2 | 220 | 0.2 | 5.6 | 100 | 120 |
| | 1,350 | 0.1 | 50 | 0.1 | 3.7 | 10 | 40 |
| erical workers, n.e.c. | 13,190 | 0.7 | 1,160 | 1.1 | 8.8 | 540 | 620 |
| d Kindred Workers | 263,150 | 14.4 | 10,900 | 10.4 | 4.1 | 6,240 | 4,660 |
| nen | 86,380 | 4.7 | 4,240 | 4.0 | 4.9 | 2,640 | 1,600 |
| stonemasons | 7,790 | 0.4 | 370 | 0.4 | 4.8 | 260 | 110 |
| tonemason apprentices | 90 | * | - | * | 2.3 | - | - |
| ors | 4,040 | 0.2 | 170 | 0.2 | 4.3 | 110 | 60 |
| | 27,040 | 1.5 | 1,430 | 1.4 | 5.3 | 760 | 670 |
| tices | 130 | * | 10 | * | 3.8 | 10 | - |
| rete finishers | 2,400 | 0.1 | 160 | 0.2 | 6.4 | 120 | 40 |
| | 12,650 | 0.7 | 600 | 0.6 | 4.7 | 440 | 160 |
| ntices | 420 | * | 20 | * | 4.1 | 20 | - |
| ing and road machine operators, zer | 6,350 | 0.4 | 300 | 0.3 | 4.7 | 190 | 110 |
| ept tile setters | 890 | 0.1 | 40 | * | 5.3 | 30 | 10 |
| ction and maintenance | 9,300 | 0.5 | 350 | 0.3 | 3.7 | 130 | 220 |
| es | 30 | * | - | * | * | - | - |
| | 290 | * | 20 | * | 6.5 | 10 | 10 |
| | 370 | * | 10 | * | 3.5 | 10 | - |
| ices | - | * | - | * | * | - | - |
| efitters | 8,970 | 0.5 | 470 | 0.4 | 5.2 | 320 | 150 |
| fitter apprentices | 310 | * | 10 | * | 4.2 | 10 | - |
| rs | 2,440 | 0.1 | 150 | 0.1 | 6.1 | 120 | 30 |
| raftsmen | 1,660 | 0.1 | 90 | 0.1 | 5.5 | 70 | 20 |
| | 1,210 | 0.1 | 40 | * | 3.4 | 30 | 10 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| Occupational Title | Estimated 1976 Employment 1/ |  | Total Job Openings, 1976 2/ |  |  | Open |
|---|---|---|---|---|---|---|
|  | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4 |
| Foremen, n.e.c. | 43,400 | 2.4 | 1,790 | 1.7 | 4.1 | 940 |
| Metalworking Craftsmen, except mechanics | 15,270 | 0.8 | 540 | 0.5 | 3.5 | 290 |
| Blacksmiths | 160 | * | 10 | * | 4.5 | - |
| Boilermakers | 810 | * | 40 | * | 5.0 | 30 |
| Heat treaters, annealers and temperers | 60 | * | - | * | 3.3 | - |
| Forgemen and hammermen | 140 | * | 10 | * | 3.6 | - |
| Job and die setters, metal | 320 | * | 10 | * | 4.3 | 10 |
| Machinists | 6,560 | 0.4 | 250 | 0.2 | 3.8 | 130 |
| Machinist apprentices | 100 | * | - | * | * | - |
| Millwrights | 880 | 0.1 | 30 | * | 3.7 | 20 |
| Molders, metal | 600 | * | 20 | * | 3.6 | 10 |
| Molder apprentices | 10 | * | - | * | * | - |
| Pattern and model makers, except paper | 330 | * | 10 | * | 2.7 | - |
| Rollers and finishers, metal | 220 | * | 10 | * | 5.0 | 10 |
| Sheetmetal workers and tinsmiths | 3,340 | 0.2 | 90 | 0.1 | 2.6 | 50 |
| Sheetmetal worker apprentices | 140 | * | 10 | * | 4.4 | 10 |
| Tool and die makers | 1,560 | 0.1 | 50 | * | 3.0 | 20 |
| Tool and die maker apprentices | 40 | * | - | * | 5.1 | - |
| Mechanics, Repairmen and Installers | 72,190 | 4.0 | 2,450 | 2.3 | 3.4 | 1,400 |
| Air conditioning, heating and refrigeration | 5,090 | 0.3 | 330 | 0.3 | 6.5 | 280 |
| Aircraft | 8,210 | 0.5 | 250 | 0.2 | 3.1 | 150 |
| Automobile accessories installers | 230 | * | - | * | * | - |
| Automobile body repairmen | 2,460 | 0.1 | 20 | * | 0.7 | - |
| Automobile mechanics | 21,570 | 1.2 | 490 | 0.5 | 2.3 | 190 |
| Automobile mechanic apprentices | 50 | * | - | * | * | - |
| Data processing machine repairmen | 910 | 0.1 | 50 | 0.1 | 6.0 | 50 |
| Farm implement | 550 | * | 20 | * | 3.2 | 10 |
| Heavy equipment mechanics, including diesel | 17,450 | 1.0 | 770 | 0.7 | 4.4 | 470 |
| Household appliance mechanics | 3,740 | 0.2 | 170 | 0.2 | 4.6 | 120 |
| Loom fixers | 2,250 | 0.1 | 50 | 0.1 | 2.1 | - |
| Office machine repairmen | 960 | 0.1 | 30 | * | 3.3 | 20 |
| Radio and television repairmen | 3,640 | 0.2 | 90 | 0.1 | 2.4 | 30 |
| Railroad and car shop repairmen | 1,240 | 0.1 | 50 | * | 3.5 | 20 |
| Mechanic, except automobile, apprentices | 180 | * | 10 | * | 4.9 | 10 |
| Other mechanics and repairmen | 3,660 | 0.2 | 120 | 0.1 | 3.3 | 50 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: - | |
|---|---|---|---|---|---|---|---|
| | | Percent of | | Percent of | Percent of | | Labor Force |
| | Number 3/ | Total 4/ | Number 3/ | Total 4/ | Employment 4/ | Growth 4/ | Seperations 3/ |
| | 43,400 | 2.4 | 1,790 | 1.7 | 4.1 | 940 | 850 |
| men, except mechanics | 15,270 | 0.8 | 540 | 0.5 | 3.5 | 290 | 250 |
| | 160 | * | 10 | * | 4.5 | - | 10 |
| | 810 | * | 40 | * | 5.0 | 30 | 10 |
| nealers and temperers | 60 | * | - | * | 3.3 | - | - |
| mmermen | 140 | * | 10 | * | 3.6 | - | 10 |
| rs, metal | 320 | * | 10 | * | 4.3 | 10 | - |
| | 6,560 | 0.4 | 250 | 0.2 | 3.8 | 130 | 120 |
| tices | 100 | * | - | * | * | - | - |
| | 880 | 0.1 | 30 | * | 3.7 | 20 | 10 |
| | 600 | * | 20 | * | 3.6 | 10 | 10 |
| s | 10 | * | - | * | * | - | - |
| l makers, except paper | 330 | * | 10 | * | 2.7 | - | 10 |
| hers, metal | 220 | * | 10 | * | 5.0 | 10 | - |
| rs and tinsmiths | 3,340 | 0.2 | 90 | 0.1 | 2.6 | 50 | 40 |
| r apprentices | 140 | * | 10 | * | 4.4 | 10 | - |
| ers | 1,560 | 0.1 | 50 | * | 3.0 | 20 | 30 |
| er apprentices | 40 | * | - | * | 5.1 | - | - |
| n and Installers | 72,190 | 4.0 | 2,450 | 2.3 | 3.4 | 1,400 | 1,050 |
| heating and refrigeration | 5,090 | 0.3 | 330 | 0.3 | 6.5 | 280 | 50 |
| | 8,210 | 0.5 | 250 | 0.2 | 3.1 | 150 | 100 |
| sories installers | 230 | * | - | * | * | - | - |
| repairmen | 2,460 | 0.1 | 20 | * | 0.7 | - | 20 |
| nics | 21,570 | 1.2 | 490 | 0.5 | 2.3 | 190 | 300 |
| nic apprentices | 50 | * | - | * | * | - | - |
| achine repairmen | 910 | 0.1 | 50 | 0.1 | 6.0 | 50 | - |
| | 550 | * | 20 | * | 3.2 | 10 | 10 |
| mechanics, including diesel | 17,450 | 1.0 | 770 | 0.7 | 4.4 | 470 | 300 |
| ce mechanics | 3,740 | 0.2 | 170 | 0.2 | 4.6 | 120 | 50 |
| | 2,250 | 0.1 | 50 | 0.1 | 2.1 | - | 50 |
| pairmen | 960 | 0.1 | 30 | * | 3.3 | 20 | 10 |
| ion repairmen | 3,640 | 0.2 | 90 | 0.1 | 2.4 | 30 | 60 |
| hop repairmen | 1,240 | 0.1 | 50 | * | 3.5 | 20 | 30 |
| automobile, apprentices | 180 | * | 10 | * | 4.9 | 10 | - |
| nd repairmen | 3,660 | 0.2 | 120 | 0.1 | 3.3 | 50 | 70 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| Occupational Title | Estimated 1976 Employment 1/ |  | Total Job Openings, 1976 2/ |  |  | Ope |
|---|---|---|---|---|---|---|
|  | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth |
| Printing Trade Craftsmen | 7,440 | 0.4 | 300 | 0.3 | 4.1 | 150 |
| Bookbinders | 530 | * | 30 | * | 6.4 | 10 |
| Compositors and typesetters | 3,050 | 0.2 | 110 | 0.1 | 3.7 | 50 |
| Electrotypers and stereotypers | 70 | * | - | * | 1.5 | - |
| Engravers, except photoengravers | 170 | * | 10 | * | 3.0 | - |
| Photoengravers and lithographers | 520 | * | 30 | * | 5.2 | 20 |
| Pressmen and plate printers | 2,940 | 0.2 | 120 | 0.1 | 4.1 | 70 |
| Pressmen apprentices | 110 | * | - | * | 3.6 | - |
| Printing trade apprentices, except pressman | 50 | * | - | * | 1.9 | - |
| Transportation and Public Utility Craftsmen | 13,140 | 0.7 | 490 | 0.5 | 3.8 | 350 |
| Electric power linemen and cablemen | 2,750 | 0.2 | 90 | 0.1 | 3.4 | 70 |
| Locomotive engineers | 1,250 | 0.1 | 70 | 0.1 | 5.7 | 30 |
| Locomotive firemen | 130 | * | - | * | 2.3 | - |
| Power station operators | 350 | * | 10 | * | 1.7 | - |
| Telephone installers and repairmen | 7,220 | 0.4 | 290 | 0.3 | 4.1 | 230 |
| Telephone linemen and splicers | 1,440 | 0.1 | 30 | * | 2.0 | 20 |
| Other Craftsmen and Kindred Workers | 25,330 | 1.4 | 1,090 | 1.0 | 4.2 | 470 |
| Bakers | 1,740 | 0.1 | 70 | 0.1 | 3.8 | 20 |
| Cabinetmakers | 2,170 | 0.1 | 70 | 0.1 | 3.2 | 30 |
| Carpet installers | 1,390 | 0.1 | 50 | 0.1 | 3.8 | 40 |
| Cranemen, derrickmen and hoistmen | 2,760 | 0.2 | 120 | 0.1 | 4.2 | 90 |
| Decorators and window dressers | 1,850 | 0.1 | 110 | 0.1 | 6.2 | 30 |
| Dental laboratory technicians | 490 | * | 20 | * | 3.5 | 10 |
| Furniture and wood finishers | 430 | * | 10 | * | 3.3 | - |
| Furriers | 10 | * | - | * | * | - |
| Glaziers | 810 | * | 40 | * | 4.6 | 30 |
| Inspectors, scalers and graders; log and lumber | 600 | * | 30 | * | 4.4 | 10 |
| Inspectors, n.e.c. | 2,230 | 0.1 | 120 | 0.1 | 5.4 | 60 |
| Jewelers and watchmakers | 730 | * | 40 | * | 4.9 | 10 |
| Millers; grain, flour and feed | 180 | * | 10 | * | 5.0 | - |
| Motion picture projectionists | 280 | * | - | * | 0.7 | - |
| Opticians and lens grinders and polishers | 450 | * | 40 | * | 7.8 | 20 |
| Piano and organ tuners and repairmen | 150 | * | 10 | * | 3.3 | - |
| Shipfitters | 30 | * | - | * | 3.3 | - |
| Shoe repairmen | 580 | * | 20 | * | 3.7 | - |
| Sign painters and letterers | 390 | * | 20 | * | 4.1 | - |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

|  | Estimated 1976 Employment 1/ |  | Total Job Openings, 1976 2/ |  |  | Openings Due To: — |  |
|---|---|---|---|---|---|---|---|
|  | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| ftsmen | 7,440 | 0.4 | 300 | 0.3 | 4.1 | 150 | 150 |
|  | 530 | * | 30 | * | 6.4 | 10 | 20 |
| d typesetters | 3,050 | 0.2 | 110 | 0.1 | 3.7 | 50 | 60 |
| nd stereotypers | 70 | * | - | * | 1.5 | - | - |
| pt photoengravers | 170 | * | 10 | * | 3.0 | - | 10 |
| and lithographers | 520 | * | 30 | * | 5.2 | 20 | 10 |
| late printers | 2,940 | 0.2 | 120 | 0.1 | 4.1 | 70 | 50 |
| ntices | 110 | * | - | * | 3.6 | - | - |
| pprentices, except pressman | 50 | * | - | * | 1.9 | - | - |
| Public Utility Craftsmen | 13,140 | 0.7 | 490 | 0.5 | 3.8 | 350 | 140 |
| ivemen and cablemen | 2,750 | 0.2 | 90 | 0.1 | 3.4 | 70 | 20 |
| ineers | 1,250 | 0.1 | 70 | 0.1 | 5.7 | 30 | 40 |
| men | 130 | * | - | * | 2.3 | - | - |
| perators | 350 | * | 10 | * | 1.7 | - | 10 |
| llers and repairmen | 7,220 | 0.4 | 290 | 0.3 | 4.1 | 230 | 60 |
| en and splicers | 1,440 | 0.1 | 30 | * | 2.0 | 20 | 10 |
| d Kindred Workers | 25,330 | 1.4 | 1,090 | 1.0 | 4.2 | 470 | 620 |
|  | 1,740 | 0.1 | 70 | 0.1 | 3.8 | 20 | 50 |
|  | 2,170 | 0.1 | 70 | 0.1 | 3.2 | 30 | 40 |
| s | 1,390 | 0.1 | 50 | 0.1 | 3.8 | 40 | 10 |
| ckmen and hoistmen | 2,760 | 0.2 | 120 | 0.1 | 4.2 | 90 | 30 |
| window dressers | 1,850 | 0.1 | 110 | 0.1 | 6.2 | 30 | 80 |
| y technicians | 490 | * | 20 | * | 3.5 | 10 | 10 |
| od finishers | 430 | * | 10 | * | 3.3 | - | 10 |
|  | 10 | * | - | * | * | - | - |
|  | 810 | * | 40 | * | 4.6 | 30 | 10 |
| ers and graders; log and lumber | 600 | * | 30 | * | 4.4 | 10 | 20 |
| c. | 2,230 | 0.1 | 120 | 0.1 | 5.4 | 60 | 60 |
| tchmakers | 730 | * | 40 | * | 4.9 | 10 | 30 |
| our and feed | 180 | * | 10 | * | 5.0 | - | 10 |
| ojectionists | 280 | * | - | * | 0.7 | - | - |
| ns grinders and polishers | 450 | * | 40 | * | 7.8 | 20 | 20 |
| tuners and repairmen | 150 | * | 10 | * | 3.3 | - | 10 |
|  | 30 | * | - | * | 3.3 | - | - |
|  | 580 | * | 20 | * | 3.7 | - | 20 |
| letterers | 390 | * | 20 | * | 4.1 | - | 20 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Ope |
|---|---|---|---|---|---|---|
| Occupational Title | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth |
| Stationary engineers | 2,640 | 0.1 | 100 | 0.1 | 3.8 | 40 |
| Stone cutters and stone carvers | 470 | * | 10 | * | 2.4 | - |
| Tailors | 1,750 | 0.1 | 80 | 0.1 | 4.6 | 20 |
| Upholsterers | 1,680 | 0.1 | 70 | 0.1 | 4.1 | 30 |
| Craftsmen and kindred workers, n.e.c. | 1,310 | 0.1 | 40 | * | 3.4 | 20 |
| Craftsmen apprentices, n.e.c. | 210 | * | 10 | * | 2.9 | 10 |
| **Operatives and Kindred Workers** | 355,350 | 19.4 | 16,240 | 15.5 | 4.6 | 5,310 |
| Operatives, except Transport | 278,330 | 5.2 | 13,450 | 12.8 | 4.8 | 3,760 |
| Semiskilled metalworking | 18,540 | 1.0 | 840 | 0.8 | 4.5 | 590 |
| Drill press operatives | 500 | * | 10 | * | 2.4 | - |
| Furnacemen, smeltermen and pourers | 640 | * | 30 | * | 5.2 | 20 |
| Grinding machine operatives | 780 | * | 30 | * | 4.0 | 10 |
| Heaters, metal | 40 | * | - | * | 5.1 | - |
| Lathe and milling machine operatives | 840 | 0.1 | 20 | * | 2.3 | 10 |
| Metal platers | 290 | * | 20 | * | 5.1 | 10 |
| Precision machine operatives, n.e.c. | 640 | * | 30 | * | 3.9 | 10 |
| Punch and stamping press operatives | 1,550 | 0.1 | 60 | 0.1 | 4.0 | 40 |
| Solderers | 70 | * | - | * | -2.8 | - |
| Welders and flame cutters | 13,190 | 0.7 | 640 | 0.6 | 4.9 | 490 |
| Semiskilled textile | 47,610 | 2.6 | 1,620 | 1.5 | 3.4 | -140 |
| Carding, lapping and combing operatives | 2,010 | 0.1 | -10 | * | 0.4 | -70 |
| Knitters, loopers and toppers | 860 | 0.1 | 40 | * | 4.6 | - |
| Spinners, twisters and winders | 20,660 | 1.1 | 890 | 0.9 | 4.3 | 70 |
| Weavers | 5,060 | 0.3 | 110 | 0.1 | 2.2 | -90 |
| Textile operatives, n.e.c. | 19,020 | 1.0 | 590 | 0.6 | 3.1 | -50 |
| Semiskilled packing and inspecting | 40,490 | 2.2 | 2,590 | 2.5 | 6.4 | 1,000 |
| Checkers, examiners and inspectors; manufacturing | 20,320 | 1.1 | 1,320 | 1.3 | 6.5 | 530 |
| Graders and sorters, manufacturing | 1,280 | 0.1 | 80 | 0.1 | 5.8 | 20 |
| Meat wrappers, retail trade | 910 | 0.1 | 70 | 0.1 | 7.3 | 30 |
| Packers and wrappers, except meat and produce | 17,120 | 0.9 | 1,070 | 1.0 | 6.3 | 410 |
| Produce graders and packers, except factory & farm | 860 | 0.1 | 50 | 0.1 | 6.4 | 10 |
| Other Operatives, except Transport | 171,690 | 9.4 | 8,400 | 8.0 | 4.9 | 2,310 |
| Asbestos and insulation workers | 680 | * | 30 | * | 4.0 | 20 |
| Assemblers | 17,800 | 1.0 | 670 | 0.6 | 3.8 | 320 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| ers | 2,640 | 0.1 | 100 | 0.1 | 3.8 | 40 | 60 |
| stone carvers | 470 | * | 10 | * | 2.4 | - | 10 |
| | 1,750 | 0.1 | 80 | 0.1 | 4.6 | 20 | 60 |
| | 1,680 | 0.1 | 70 | 0.1 | 4.1 | 30 | 40 |
| dred workers, n.e.c. | 1,310 | 0.1 | 40 | * | 3.4 | 20 | 20 |
| ices, n.e.c. | 210 | * | 10 | * | 2.9 | 10 | - |
| Workers | 355,350 | 19.4 | 16,240 | 15.5 | 4.6 | 5,310 | 10,930 |
| ransport | 278,330 | 5.2 | 13,450 | 12.8 | 4.8 | 3,760 | 9,690 |
| working | 18,540 | 1.0 | 840 | 0.8 | 4.5 | 590 | 250 |
| ratives | 500 | * | 10 | * | 2.4 | - | 10 |
| neltermen and pourers | 640 | * | 30 | * | 5.2 | 20 | 10 |
| ne operatives | 780 | * | 30 | * | 4.0 | 10 | 20 |
| | 40 | * | - | * | 5.1 | - | - |
| ing machine operatives | 840 | 0.1 | 20 | * | 2.3 | 10 | 10 |
| | 290 | * | 20 | * | 5.1 | 10 | 10 |
| ine operatives, n.e.c. | 640 | * | 30 | * | 3.9 | 10 | 20 |
| ping press operatives | 1,550 | 0.1 | 60 | 0.1 | 4.0 | 40 | 20 |
| | 70 | * | - | * | -2.8 | - | - |
| me cutters | 13,190 | 0.7 | 640 | 0.6 | 4.9 | 490 | 150 |
| | 47,610 | 2.6 | 1,620 | 1.5 | 3.4 | -140 | 1,760 |
| g and combing operatives | 2,010 | 0.1 | -10 | * | 0.4 | -70 | 60 |
| rs and toppers | 860 | 0.1 | 40 | * | 4.6 | - | 40 |
| ers and winders | 20,660 | 1.1 | 890 | 0.9 | 4.3 | 70 | 820 |
| | 5,060 | 0.3 | 110 | 0.1 | 2.2 | -90 | 200 |
| ves, n.e.c. | 19,020 | 1.0 | 590 | 0.6 | 3.1 | -50 | 640 |
| g and inspecting | 40,490 | 2.2 | 2,590 | 2.5 | 6.4 | 1,000 | 1,590 |
| iners and inspectors; manufacturing | 20,320 | 1.1 | 1,320 | 1.3 | 6.5 | 530 | 790 |
| tters, manufacturing | 1,280 | 0.1 | 80 | 0.1 | 5.8 | 20 | 60 |
| retail trade | 910 | 0.1 | 70 | 0.1 | 7.3 | 30 | 40 |
| appers, except meat and produce | 17,120 | 0.9 | 1,070 | 1.0 | 6.3 | 410 | 660 |
| s and packers, except factory & farm | 860 | 0.1 | 50 | 0.1 | 6.4 | 10 | 40 |
| cept Transport | 171,690 | 9.4 | 8,400 | 8.0 | 4.9 | 2,310 | 6,090 |
| dation workers | 680 | * | 30 | * | 4.0 | 20 | 10 |
| | 17,800 | 1.0 | 670 | 0.6 | 3.8 | 320 | 350 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openi |
|---|---|---|---|---|---|---|
| Occupational Title | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4 |
| Blasters and powdermen | 80 | * | - | * | 3.8 | - |
| Bottling and canning operatives | 860 | 0.1 | 30 | * | 3.4 | 10 |
| Chainmen, rodmen and axmen; surveying | 360 | * | 20 | * | 4.8 | 10 |
| Clothing ironers and pressers | 5,850 | 0.3 | 220 | 0.2 | 3.8 | -60 |
| Cutting operatives, n.e.c. | 5,590 | 0.3 | 270 | 0.3 | 4.9 | 110 |
| Dressmakers and seamstresses, except factory | 2,340 | 0.1 | 220 | 0.2 | 9.2 | 40 |
| Drillers, earth | 850 | 0.1 | 20 | * | 3.0 | 10 |
| Drywall installers and lathers | 1,790 | 0.1 | 100 | 0.1 | 5.6 | 90 |
| Dyers | 2,480 | 0.1 | 100 | 0.1 | 4.0 | 60 |
| Filers, polishers, sanders and buffers | 1,930 | 0.1 | 30 | * | 1.8 | -10 |
| Garage workers and gas station attendants | 10,780 | 0.6 | 280 | 0.3 | 2.6 | 70 |
| Laundry and dry cleaning operatives, n.e.c. | 3,820 | 0.2 | 220 | 0.2 | 5.7 | 30 |
| Meat cutters and butchers, except manufacturing | 3,970 | 0.2 | 90 | 0.1 | 2.2 | 10 |
| Meat cutters and butchers, manufacturing | 2,460 | 0.1 | 140 | 0.1 | 5.7 | 40 |
| Milliners | 10 | * | - | * | * | - |
| Mine operatives, n.e.c. | 1,750 | 0.1 | - | * | 0.2 | -30 |
| Mixing operatives | 2,140 | 0.1 | 70 | 0.1 | 3.1 | 40 |
| Oilers and greasers, except auto | 960 | 0.1 | 20 | * | 2.7 | - |
| Painters, manufactured articles | 2,350 | 0.1 | 50 | 0.1 | 2.2 | 10 |
| Photographic process workers | 1,070 | 0.1 | 70 | 0.1 | 6.4 | 30 |
| Riveters and fasteners | 540 | * | 10 | * | 2.2 | - |
| Sailors and deckhands | 200 | * | - | * | 1.0 | - |
| Sawyers | 4,230 | 0.2 | 180 | 0.2 | 4.3 | 90 |
| Sewers and stitchers | 52,030 | 2.9 | 3,820 | 3.6 | 7.3 | 920 |
| Shoemaking machine operatives | 760 | * | - | * | -0.1 | -30 |
| Stationary firemen | 1,920 | 0.1 | 70 | 0.1 | 3.3 | 10 |
| Winding operatives, n.e.c. | 1,740 | 0.1 | 90 | 0.1 | 5.0 | 30 |
| Miscellaneous machine operatives | 22,780 | 1.3 | 980 | 0.9 | 4.3 | 390 |
| Operatives, n.e.c. | 17,570 | 1.0 | 600 | 0.6 | 3.4 | 100 |
| Transport Equipment Operatives | 77,020 | 4.2 | 2,790 | 2.7 | 3.6 | 1,550 |
| Boatmen and canalmen | 50 | * | - | * | 1.9 | - |
| Bus drivers | 6,790 | 0.4 | 490 | 0.5 | 7.2 | 260 |
| Conductors and motormen, urban rail transit | 50 | * | - | * | 1.8 | - |
| Deliverymen and routemen | 15,350 | 0.8 | 590 | 0.6 | 3.8 | 380 |
| Forklift and tow motor operatives | 7,200 | 0.4 | 230 | 0.2 | 3.2 | 160 |
| Motormen: mine, factory, logging camp, etc. | 60 | * | - | * | 3.5 | - |
| Parking attendants | 560 | * | 40 | * | 6.1 | 10 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| lermen | 80 | * | - | * | 3.8 | - | - |
| ing operatives | 860 | 0.1 | 30 | * | 3.4 | 10 | 20 |
| and axmen; surveying | 360 | * | 20 | * | 4.8 | 10 | 10 |
| nd pressers | 5,850 | 0.3 | 220 | 0.2 | 3.8 | -60 | 280 |
| s, n.e.c. | 5,590 | 0.3 | 270 | 0.3 | 4.9 | 110 | 160 |
| seamstresses, except factory | 2,340 | 0.1 | 220 | 0.2 | 9.2 | 40 | 180 |
| | 850 | 0.1 | 20 | * | 3.0 | 10 | 10 |
| and lathers | 1,790 | 0.1 | 100 | 0.1 | 5.6 | 90 | 10 |
| | 2,480 | 0.1 | 100 | 0.1 | 4.0 | 60 | 40 |
| sanders and buffers | 1,930 | 0.1 | 30 | * | 1.8 | -10 | 40 |
| d gas station attendants | 10,780 | 0.6 | 280 | 0.3 | 2.6 | 70 | 210 |
| leaning operatives, n.e.c. | 3,820 | 0.2 | 220 | 0.2 | 5.7 | 30 | 190 |
| utchers, except manufacturing | 3,970 | 0.2 | 90 | 0.1 | 2.2 | 10 | 80 |
| utchers, manufacturing | 2,460 | 0.1 | 140 | 0.1 | 5.7 | 40 | 100 |
| | 10 | * | - | * | * | - | - |
| .e.c. | 1,750 | 0.1 | - | * | 0.2 | -30 | 30 |
| | 2,140 | 0.1 | 70 | 0.1 | 3.1 | 40 | 30 |
| rs, except auto | 960 | 0.1 | 20 | * | 2.7 | - | 20 |
| tured articles | 2,350 | 0.1 | 50 | 0.1 | 2.2 | 10 | 40 |
| ess workers | 1,070 | 0.1 | 70 | 0.1 | 6.4 | 30 | 40 |
| eners | 540 | * | 10 | * | 2.2 | - | 10 |
| ands | 200 | * | - | * | 1.0 | - | - |
| | 4,230 | 0.2 | 180 | 0.2 | 4.3 | 90 | 90 |
| ers | 52,030 | 2.9 | 3,820 | 3.6 | 7.3 | 920 | 2,900 |
| ne operatives | 760 | * | - | * | -0.1 | -30 | 30 |
| | 1,920 | 0.1 | 70 | 0.1 | 3.3 | 10 | 60 |
| s, n.e.c. | 1,740 | 0.1 | 90 | 0.1 | 5.0 | 30 | 60 |
| chine operatives | 22,780 | 1.3 | 980 | 0.9 | 4.3 | 390 | 590 |
| | 17,570 | 1.0 | 600 | 0.6 | 3.4 | 100 | 500 |
| Operatives | 77,020 | 4.2 | 2,790 | 2.7 | 3.6 | 1,550 | 1,240 |
| lmen | 50 | * | - | * | 1.9 | - | - |
| | 6,790 | 0.4 | 490 | 0.5 | 7.2 | 260 | 230 |
| otormen, urban rail transit | 50 | * | - | * | 1.8 | - | - |
| outemen | 15,350 | 0.8 | 590 | 0.6 | 3.8 | 380 | 210 |
| otor operatives | 7,200 | 0.4 | 230 | 0.2 | 3.2 | 160 | 70 |
| ctory, logging camp, etc. | 60 | * | - | * | 3.5 | - | - |
| s | 560 | * | 40 | * | 6.1 | 10 | 30 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| Occupational Title | Estimated 1976 Employment 1/ Number 3/ | Estimated 1976 Employment 1/ Percent of Total 4/ | Total Job Openings, 1976 2/ Number 3/ | Total Job Openings, 1976 2/ Percent of Total 4/ | Total Job Openings, 1976 2/ Percent of Employment 4/ |
|---|---|---|---|---|---|
| Railroad brakemen | 850 | 0.1 | 20 | * | 2.6 |
| Railroad switchmen | 1,540 | 0.1 | 40 | * | 2.8 |
| Taxicab drivers and chauffeurs | 2,940 | 0.2 | 90 | 0.1 | 3.0 |
| Truck drivers | 41,630 | 2.3 | 1,290 | 1.2 | 3.1 |
| **Service Workers** | 229,310 | 12.5 | 16,070 | 15.3 | 7.0 |
| Cleaning Service Workers | 46,800 | 2.6 | 3,350 | 3.2 | 7.2 |
| Chambermaids and maids, except private household | 8,290 | 0.5 | 780 | 0.7 | 9.4 |
| Cleaners and charwomen | 10,510 | 0.6 | 630 | 0.6 | 6.0 |
| Janitors and sextons | 28,000 | 1.5 | 1,940 | 1.9 | 6.9 |
| Food Service Workers | 55,300 | 3.0 | 3,850 | 3.7 | 7.0 |
| Bartenders | 1,310 | 0.1 | 60 | 0.1 | 4.7 |
| Busboys | 920 | 0.1 | 30 | * | 3.3 |
| Cooks, except private household | 23,090 | 1.3 | 1,510 | 1.4 | 6.6 |
| Dishwashers | 2,700 | 0.2 | 180 | 0.2 | 6.7 |
| Food counter and fountain workers | 2,320 | 0.1 | 120 | 0.1 | 5.0 |
| Waiters | 18,760 | 1.0 | 1,470 | 1.4 | 7.8 |
| Food service workers, n.e.c., except private hhd. | 6,200 | 0.3 | 480 | 0.5 | 7.7 |
| Health Service Workers | 27,400 | 1.5 | 2,440 | 2.3 | 8.9 |
| Dental assistants | 1,890 | 0.1 | 220 | 0.2 | 11.6 |
| Health aides, except nursing | 2,970 | 0.2 | 330 | 0.3 | 11.0 |
| Health trainees | 270 | * | - | * | -1.5 |
| Lay midwives | 10 | * | - | * | * |
| Nursing aides, orderlies and attendants | 16,220 | 0.9 | 1,280 | 1.2 | 7.9 |
| Practical nurses | 6,040 | 0.3 | 610 | 0.6 | 10.1 |
| Personal Service Workers | 30,320 | 1.7 | 2,580 | 2.5 | 8.5 |
| Airline stewardesses | 2,060 | 0.1 | 320 | 0.3 | 15.4 |
| Attendants, recreation and amusement | 1,020 | 0.1 | 60 | 0.1 | 6.2 |
| Attendants, personal service, n.e.c. | 780 | * | 50 | 0.1 | 6.3 |
| Baggage porters and bellhops | 450 | * | -10 | * | -1.3 |
| Barbers | 3,940 | 0.2 | 200 | 0.2 | 5.0 |
| Boarding and lodging housekeepers | 100 | * | - | * | -3.0 |
| Bootblacks | 70 | * | - | * | -1.5 |
| Childcare workers, except private household | 4,170 | 0.2 | 420 | 0.4 | 10.0 |
| Elevator operators | 280 | * | - | * | * |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: - | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| en | 850 | 0.1 | 20 | * | 2.6 | 10 | 10 |
| nen | 1,540 | 0.1 | 40 | * | 2.8 | 20 | 20 |
| and chauffeurs | 2,940 | 0.2 | 90 | 0.1 | 3.0 | -10 | 100 |
| | 41,630 | 2.3 | 1,290 | 1.2 | 3.1 | 720 | 570 |
| | 229,310 | 12.5 | 16,070 | 15.3 | 7.0 | 4,330 | 11,740 |
| orkers | 46,800 | 2.6 | 3,350 | 3.2 | 7.2 | 1,360 | 1,990 |
| nd maids, except private household | 8,290 | 0.5 | 780 | 0.7 | 9.4 | 310 | 470 |
| arwomen | 10,510 | 0.6 | 630 | 0.6 | 6.0 | 160 | 470 |
| tons | 28,000 | 1.5 | 1,940 | 1.9 | 6.9 | 890 | 1,050 |
| rs | 55,300 | 3.0 | 3,850 | 3.7 | 7.0 | 1,180 | 2,670 |
| | 1,310 | 0.1 | 60 | 0.1 | 4.7 | 30 | 30 |
| | 920 | 0.1 | 30 | * | 3.3 | 10 | 20 |
| ivate household | 23,090 | 1.3 | 1,510 | 1.4 | 6.6 | 470 | 1,040 |
| | 2,700 | 0.2 | 180 | 0.2 | 6.7 | 70 | 110 |
| fountain workers | 2,320 | 0.1 | 120 | 0.1 | 5.0 | - | 120 |
| | 18,760 | 1.0 | 1,470 | 1.4 | 7.8 | 440 | 1,030 |
| kers, n.e.c., except private hhd. | 6,200 | 0.3 | 480 | 0.5 | 7.7 | 160 | 320 |
| ers | 27,400 | 1.5 | 2,440 | 2.3 | 8.9 | 940 | 1,500 |
| | 1,890 | 0.1 | 220 | 0.2 | 11.6 | 90 | 130 |
| cept nursing | 2,970 | 0.2 | 330 | 0.3 | 11.0 | 160 | 170 |
| | 270 | * | - | * | -1.5 | -30 | 30 |
| | 10 | * | - | * | * | - | - |
| derlies and attendants | 16,220 | 0.9 | 1,280 | 1.2 | 7.9 | 450 | 830 |
| | 6,040 | 0.3 | 610 | 0.6 | 10.1 | 270 | 340 |
| rkers | 30,320 | 1.7 | 2,580 | 2.5 | 8.5 | 800 | 1,780 |
| ses | 2,060 | 0.1 | 320 | 0.3 | 15.4 | 100 | 220 |
| ation and amusement | 1,020 | 0.1 | 60 | 0.1 | 6.2 | 30 | 30 |
| nal service, n.e.c. | 780 | * | 50 | 0.1 | 6.3 | 10 | 40 |
| nd bellhops | 450 | * | -10 | * | -1.3 | -20 | 10 |
| | 3,940 | 0.2 | 200 | 0.2 | 5.0 | 30 | 170 |
| ing housekeepers | 100 | * | - | * | -3.0 | -10 | 10 |
| | 70 | * | - | * | -1.5 | - | - |
| , except private household | 4,170 | 0.2 | 420 | 0.4 | 10.0 | 140 | 280 |
| | 280 | * | - | * | * | -20 | 20 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Ope |
|---|---|---|---|---|---|---|
| Occupational Title | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth |
| Hairdressers and cosmetologists | 13,480 | 0.7 | 1,200 | 1.2 | 8.9 | 390 |
| Housekeepers, except private household | 3,180 | 0.2 | 280 | 0.3 | 8.9 | 120 |
| Personal service apprentices | 40 | * | - | * | -2.3 | - |
| School monitors | 90 | * | 10 | * | 11.0 | - |
| Ushers, recreation and amusement | 120 | * | - | * | 1.6 | - |
| Welfare service aides | 540 | * | 50 | 0.1 | 9.9 | 30 |
| Protective Service Workers | 24,250 | 1.3 | 1,610 | 1.5 | 6.7 | 900 |
| Crossing guards and bridge tenders | 890 | 0.1 | 60 | 0.1 | 7.3 | 30 |
| Firemen, fire protection | 5,060 | 0.3 | 330 | 0.3 | 6.5 | 270 |
| Guards and watchmen | 7,720 | 0.4 | 530 | 0.5 | 6.8 | 110 |
| Marshals and constables | 190 | * | 10 | * | 7.0 | 10 |
| Policemen and detectives | 9,020 | 0.5 | 560 | 0.5 | 6.2 | 410 |
| Sheriffs and bailiffs | 1,370 | 0.1 | 120 | 0.1 | 8.7 | 70 |
| Private Household Workers | 45,240 | 2.5 | 2,240 | 2.1 | 5.0 | -850 |
| Child care workers | 4,060 | 0.2 | 250 | 0.2 | 6.2 | -70 |
| Cooks, private household | 1,780 | 0.1 | 110 | 0.1 | 6.1 | -20 |
| Housekeepers, private household | 2,520 | 0.1 | 130 | 0.1 | 5.3 | -40 |
| Laundresses, private household | 390 | * | 20 | * | 4.4 | -20 |
| Maids and servants, private household | 36,490 | 2.0 | 1,730 | 1.7 | 4.8 | -700 |
| Laborers, except Farm | 80,130 | 4.4 | 2,860 | 2.7 | 3.6 | 1,140 |
| Animal Caretakers, except farm | 1,350 | 0.1 | 70 | 0.1 | 5.0 | 30 |
| Carpenters' Helpers | 1,420 | 0.1 | - | * | -0.3 | -30 |
| Construction Laborers, except carpenters' helpers | 17,260 | 0.9 | 690 | 0.7 | 4.0 | 360 |
| Fishermen and Oystermen | 310 | * | 10 | * | 3.0 | - |
| Freight and Material Handlers | 17,290 | 1.0 | 560 | 0.5 | 3.2 | 280 |
| Garbage Collectors | 3,790 | 0.2 | 260 | 0.3 | 7.0 | 190 |
| Gardeners and Groundskeepers, except farm | 6,890 | 0.4 | 340 | 0.3 | 4.9 | 20 |
| Longshoremen and Stevedores | 800 | * | 30 | * | 4.3 | 20 |
| Lumbermen, Raftsmen and Woodchoppers | 5,130 | 0.3 | 10 | * | 0.2 | -70 |
| Stock Handlers | 14,700 | 0.8 | 600 | 0.6 | 4.1 | 320 |
| Teamsters | 250 | * | -10 | * | -4.0 | -20 |
| Vehicle Washers and Equipment Cleaners | 3,140 | 0.2 | 90 | 0.1 | 2.8 | 10 |
| Warehousemen, n.e.c. | 2,770 | 0.2 | 70 | 0.1 | 2.5 | 20 |
| Other Laborers, except farm | 5,030 | 0.3 | 140 | 0.1 | 2.8 | 10 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| d cosmetologists | 13,480 | 0.7 | 1,200 | 1.2 | 8.9 | 390 | 810 |
| except private household | 3,180 | 0.2 | 280 | 0.3 | 8.9 | 120 | 160 |
| e apprentices | 40 | * | - | * | -2.3 | - | - |
| | 90 | * | 10 | * | 11.0 | - | 10 |
| ion and amusement | 120 | * | - | * | 1.6 | - | - |
| aides | 540 | * | 50 | 0.1 | 9.9 | 30 | 20 |
| Workers | 24,250 | 1.3 | 1,610 | 1.5 | 6.7 | 900 | 710 |
| and bridge tenders | 890 | 0.1 | 60 | 0.1 | 7.3 | 30 | 30 |
| otection | 5,060 | 0.3 | 330 | 0.3 | 6.5 | 270 | 60 |
| chmen | 7,720 | 0.4 | 530 | 0.5 | 6.8 | 110 | 420 |
| nstables | 190 | * | 10 | * | 7.0 | 10 | - |
| etectives | 9,020 | 0.5 | 560 | 0.5 | 6.2 | 410 | 150 |
| iffs | 1,370 | 0.1 | 120 | 0.1 | 8.7 | 70 | 50 |
| Workers | 45,240 | 2.5 | 2,240 | 2.1 | 5.0 | -850 | 3,090 |
| ers | 4,060 | 0.2 | 250 | 0.2 | 6.2 | -70 | 320 |
| ousehold | 1,780 | 0.1 | 110 | 0.1 | 6.1 | -20 | 130 |
| rivate household | 2,520 | 0.1 | 130 | 0.1 | 5.3 | -40 | 170 |
| ivate household | 390 | * | 20 | * | 4.4 | -20 | 40 |
| nts, private household | 36,490 | 2.0 | 1,730 | 1.7 | 4.8 | -700 | 2,430 |
| | 80,130 | 4.4 | 2,860 | 2.7 | 3.6 | 1,140 | 1,720 |
| except farm | 1,350 | 0.1 | 70 | 0.1 | 5.0 | 30 | 40 |
| | 1,420 | 0.1 | - | * | -0.3 | -30 | 30 |
| ers, except carpenters' helpers | 17,260 | 0.9 | 690 | 0.7 | 4.0 | 360 | 330 |
| ermen | 310 | * | 10 | * | 3.0 | - | 10 |
| l Handlers | 17,290 | 1.0 | 560 | 0.5 | 3.2 | 280 | 280 |
| | 3,790 | 0.2 | 260 | 0.3 | 7.0 | 190 | 70 |
| ndskeepers, except farm | 6,890 | 0.4 | 340 | 0.3 | 4.9 | 20 | 320 |
| Stevedores | 800 | * | 30 | * | 4.3 | 20 | 10 |
| en and Woodchoppers | 5,130 | 0.3 | 10 | * | 0.2 | -70 | 80 |
| | 14,700 | 0.8 | 600 | 0.6 | 4.1 | 320 | 280 |
| | 250 | * | -10 | * | -4.0 | -20 | 10 |
| d Equipment Cleaners | 3,140 | 0.2 | 90 | 0.1 | 2.8 | 10 | 80 |
| c. | 2,770 | 0.2 | 70 | 0.1 | 2.5 | 20 | 50 |
| ept farm | 5,030 | 0.3 | 140 | 0.1 | 2.8 | 10 | 130 |

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | O |
|---|---|---|---|---|---|---|
| Occupational Title | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growt |
| **Farmers and Farm Workers** | 46,540 | 2.6 | 210 | 0.2 | 0.5 | -1,77 |
| Farmers and Farm Managers | 22,380 | 1.2 | 280 | 0.3 | 1.2 | -78 |
| Farmers (owners and tenants) | 20,680 | 1.1 | 180 | 0.2 | 0.9 | -84 |
| Farm managers | 1,700 | 0.1 | 100 | 0.1 | 5.9 | 6 |
| Farm Laborers and Farm Foremen | 24,160 | 1.3 | -70 | 0.1 | -0.3 | -99 |
| Farm foremen | 680 | * | 20 | * | 2.6 | -1 |
| Farm laborers, wage workers | 22,260 | 1.2 | -80 | 0.1 | -0.4 | -94 |
| Farm laborers, unpaid family workers | 1,130 | 0.1 | -10 | * | -0.8 | -4 |
| Farm service laborers, self-employed | 90 | * | - | * | 4.6 | |

---

1/ Occupational employment levels are simple interpolations of the projected long-run (1970-1980) labor market trend and should not be in representing cyclical fluctuations in the economy. (Note: The 1970 data in Table 3 excludes 158,972 "not specified" and "allocated had been shown in the 1970 Census occupational employment tables.

2/ Job openings data reflect annual average changes in employment over the 1970-1980 period as well as separations estimated on the bas average annual employment level during the period and estimated 1976 labor force separation rates.

3/ Estimates were rounded to ten's.

4/ Percents were computed from unrounded data and may not add to 100.0.

" _ " denotes "zero".

* denotes less than 0.05.

"n.e.c." denotes "not elsewhere classified."

## TABLE 5 - continued
## GEORGIA 1976 EMPLOYMENT AND JOB OPENINGS BY OCCUPATION

| | Estimated 1976 Employment 1/ | | Total Job Openings, 1976 2/ | | | Openings Due To: – | |
|---|---|---|---|---|---|---|---|
| | Number 3/ | Percent of Total 4/ | Number 3/ | Percent of Total 4/ | Percent of Employment 4/ | Growth 4/ | Labor Force Separations 3/ |
| rkers | 46,540 | 2.6 | 210 | 0.2 | 0.5 | -1,770 | 1,980 |
| Managers | 22,380 | 1.2 | 280 | 0.3 | 1.2 | -780 | 1,060 |
| s and tenants) | 20,680 | 1.1 | 180 | 0.2 | 0.9 | -840 | 1,020 |
| | 1,700 | 0.1 | 100 | 0.1 | 5.9 | 60 | 40 |
| d Farm Foremen | 24,160 | 1.3 | -70 | 0.1 | -0.3 | -990 | 920 |
| | 680 | * | 20 | * | 2.6 | -10 | 30 |
| wage workers | 22,260 | 1.2 | -80 | 0.1 | -0.4 | -940 | 860 |
| unpaid family workers | 1,130 | 0.1 | -10 | * | -0.8 | -40 | 30 |
| aborers, self-employed | 90 | * | - | * | 4.6 | - | - |

ployment levels are simple interpolations of the projected long-run (1970-1980) labor market trend and should not be interpreted as lical fluctuations in the economy. (Note: The 1970 data in Table 3 excludes 158,972 "not specified" and "allocated" cases which in the 1970 Census occupational employment tables.

a reflect annual average changes in employment over the 1970-1980 period as well as separations estimated on the basis of the mployment level during the period and estimated 1976 labor force separation rates.

ounded to ten's.

omputed from unrounded data and may not add to 100.0.

".

.05.

t elsewhere classified."

## APPENDIX B

## NATIONAL INDUSTRY AND OCCUPATION PROJECTIONS TABLES

Table 1. National Total Employment by Industry, 1970 and Projected to 1980

Table 2. National 1970 Employment and Projected 1980 Requirements by Occupation

Table 3. National 1970 Employment, Projected 1980 Requirements and Annual Average Openings, 1970-80, by Occupation

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980
## (IN THOUSANDS)

| Industry | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| **Total, All Industries** | 78,627.3 | 95,817.0 | 17,189.7 |
| **Agriculture, Forestry, Fisheries** | 3,561.1 | 2,418.2 | -1,142.9 |
| Agriculture | 3,463.4 | 2,326.0 | -1,137.4 |
| Agricultural production | 3,137.0 | 2,106.8 | -1,030.2 |
| Services, except horticulture | 169.0 | 113.5 | -55.5 |
| Horticulture services | 157.4 | 105.7 | -51.7 |
| Forestry | 53.4 | 55.5 | 2.1 |
| Fisheries | 44.3 | 36.7 | 7.6 |
| **Mining** | 634.0 | 629.7 | -4.3 |
| Metal mining | 93.7 | 103.3 | 9.6 |
| Coal mining | 144.8 | 149.6 | 4.8 |
| Crude petroleum and natural gas | 279.2 | 251.7 | -27.5 |
| Nonmetallic mining, quarrying | 116.3 | 125.0 | 8.7 |
| **Construction** | 4,673.2 | 5,736.7 | 964.5 |
| General building contractors | 1,138.0 | 1,265.0 | 127.0 |
| General contractors, except building | 1,401.8 | 1,765.5 | 363.7 |
| Special trade contractors | 2,133.4 | 2,607.2 | 473.8 |
| **Manufacturing** | 19,635.3 | 22,880.1 | 3,244.8 |
| Durable Goods | 11,410.3 | 13,631.1 | 2,220.8 |
| Ordnance | 296.3 | 252.0 | -44.3 |
| Lumber and wood products | 620.5 | 680.6 | 60.1 |
| Logging | 110.8 | 110.2 | -0.6 |
| Sawmill, planing mill, mill works | 388.3 | 433.4 | 45.1 |
| Miscellaneous wood products | 121.4 | 136.9 | 15.5 |
| Furniture and fixtures | 464.3 | 614.4 | 150.1 |
| Stone, clay, glass products | 644.1 | 797.7 | 153.6 |
| Glass and glass products | 185.2 | 239.8 | 54.6 |
| Cement, concrete, plaster | 221.8 | 290.6 | 68.8 |
| Structural clay products | 59.1 | 52.6 | -6.5 |
| Pottery and related products | 43.9 | 38.8 | -5.1 |
| Miscellaneous nonmetallic, stone | 134.1 | 175.8 | 41.7 |
| Primary metal industries | 1,303.3 | 1,325.7 | 22.4 |
| Blast furnaces, steel works | 556.0 | 529.6 | -26.4 |
| Other primary steel | 367.7 | 391.0 | 23.3 |
| Primary aluminum industries | 156.4 | 166.9 | 10.5 |
| Other primary nonferrous | 223.2 | 238.1 | 14.9 |

TABLE 1

NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY,
1970 AND PROJECTED TO 1980
(IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| | **78,627.3** | **95,817.0** | **17,189.7** | **21.9** |
| **isheries** | **3,561.1** | **2,418.2** | **-1,142.9** | **-32.1** |
| | 3,463.4 | 2,326.0 | -1,137.4 | -32.8 |
| ction | 3,137.0 | 2,106.8 | -1,030.2 | -32.8 |
| orticulture | 169.0 | 113.5 | -55.5 | -32.8 |
| es | 157.4 | 105.7 | -51.7 | -32.8 |
| | 53.4 | 55.5 | 2.1 | 3.9 |
| | 44.3 | 36.7 | 7.6 | -17.2 |
| | **634.0** | **629.7** | **-4.3** | **-0.7** |
| | 93.7 | 103.3 | 9.6 | 10.2 |
| | 144.8 | 149.6 | 4.8 | 3.3 |
| atural gas | 279.2 | 251.7 | -27.5 | -9.8 |
| uarrying | 116.3 | 125.0 | 8.7 | 7.5 |
| | **4,673.2** | **5,736.7** | **964.5** | **20.6** |
| actors | 1,138.0 | 1,265.0 | 127.0 | 11.2 |
| except building | 1,401.8 | 1,765.5 | 363.7 | 25.9 |
| ors | 2,133.4 | 2,607.2 | 473.8 | 22.2 |
| | **19,635.3** | **22,880.1** | **3,244.8** | **16.5** |
| | 11,410.3 | 13,631.1 | 2,220.8 | 19.5 |
| | 296.3 | 252.0 | -44.3 | -15.0 |
| roducts | 620.5 | 680.6 | 60.1 | 9.7 |
| | 110.8 | 110.2 | -0.6 | -0.5 |
| mill, mill works | 388.3 | 433.4 | 45.1 | 11.6 |
| ood products | 121.4 | 136.9 | 15.5 | 12.8 |
| es | 464.3 | 614.4 | 150.1 | 32.3 |
| products | 644.1 | 797.7 | 153.6 | 23.8 |
| products | 185.2 | 239.8 | 54.6 | 29.5 |
| e, plaster | 221.8 | 290.6 | 68.8 | 31.0 |
| roducts | 59.1 | 52.6 | -6.5 | -11.0 |
| ted products | 43.9 | 38.8 | -5.1 | -11.6 |
| onmetallic, stone | 134.1 | 175.8 | 41.7 | 31.1 |
| tries | 1,303.3 | 1,325.7 | 22.4 | 1.7 |
| steel works | 556.0 | 529.6 | -26.4 | -4.7 |
| eel | 367.7 | 391.0 | 23.3 | 6.3 |
| n industries | 156.4 | 166.9 | 10.5 | 6.7 |
| nferrous | 223.2 | 238.1 | 14.9 | 6.7 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| Industry | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Fabricated metal products | 1,387.3 | 1,830.1 | 442.8 |
| Cutlery, other hardware | 151.6 | 196.7 | 45.1 |
| Fabricated metal products | 431.4 | 563.2 | 131.8 |
| Screw machine products | 104.8 | 129.9 | 25.1 |
| Metal stamping | 232.3 | 317.1 | 84.8 |
| Miscellaneous fabricated metal products | 467.2 | 623.0 | 155.8 |
| Machinery, except electrical | 1,978.4 | 2,558.4 | 580.0 |
| Engines and turbines | 110.0 | 156.0 | 46.0 |
| Farm machinery, equipment | 128.6 | 145.8 | 17.2 |
| Construction machines | 293.3 | 348.4 | 55.1 |
| Metalworking machinery | 317.8 | 382.0 | 64.2 |
| Office, accounting machines | 90.9 | 100.0 | 9.1 |
| Electronic computing equipment | 187.9 | 387.3 | 199.4 |
| Machinery, n.e.c. | 849.9 | 1,038.8 | 188.9 |
| Electrical machinery | 1,919.5 | 2,286.4 | 366.9 |
| Household appliances | 184.7 | 204.7 | 20.0 |
| Radio, TV, communication equipment | 630.3 | 636.5 | 6.2 |
| Electrical machinery, n.e.c. | 1,104.5 | 1,445.2 | 340.7 |
| Transportation equipment | 1,907.0 | 2,224.7 | 317.7 |
| Motor vehicle equipment | 804.6 | 1,028.8 | 224.2 |
| Aircraft and parts | 665.9 | 561.9 | -104.0 |
| Ship, boat building, repair | 275.6 | 419.3 | 143.7 |
| Railroad equipment | 50.6 | 55.4 | 4.8 |
| Mobile dwelling | 85.2 | 118.2 | 33.0 |
| Cycles, miscellaneous transportation equipment | 25.1 | 41.0 | 15.9 |
| Professional, scientific instruments | 453.9 | 600.6 | 146.7 |
| Scientific instruments | 177.3 | 229.0 | 51.7 |
| Optical, health services supplies | 136.4 | 181.3 | 44.9 |
| Photo equipment and supplies | 108.9 | 152.4 | 43.5 |
| Watches and clock devices | 31.3 | 37.9 | 6.6 |
| Miscellaneous manufacturing | 435.5 | 460.5 | 25.0 |
| Nondurable Goods | 8,225.0 | 9,249.0 | 1,024.0 |
| Food and kindred products | 1,784.1 | 1,777.4 | -6.7 |
| Meat products | 344.2 | 363.6 | 19.4 |
| Dairy products | 244.6 | 175.3 | -69.3 |
| Canning and preserving | 284.1 | 336.3 | 52.2 |
| Grain-mill products | 138.1 | 138.9 | 0.8 |
| Bakery products | 273.6 | 244.4 | -29.2 |
| Confectionery products | 82.7 | 86.4 | 3.7 |

## TABLE 1

## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued

## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| products | 1,387.3 | 1,830.1 | 442.8 | 31.9 |
| hardware | 151.6 | 196.7 | 45.1 | 29.7 |
| tal products | 431.4 | 563.2 | 131.8 | 30.6 |
| products | 104.8 | 129.9 | 25.1 | 24.0 |
| g | 232.3 | 317.1 | 84.8 | 36.5 |
| fabricated metal products | 467.2 | 623.0 | 155.8 | 33.3 |
| t electrical | 1,978.4 | 2,558.4 | 580.0 | 29.3 |
| urbines | 110.0 | 156.0 | 46.0 | 41.8 |
| ry, equipment | 128.6 | 145.8 | 17.2 | 13.4 |
| machines | 293.3 | 348.4 | 55.1 | 18.8 |
| machinery | 317.8 | 382.0 | 64.2 | 20.2 |
| nting machines | 90.9 | 100.0 | 9.1 | 10.0 |
| mputing equipment | 187.9 | 387.3 | 199.4 | 106.1 |
| .c. | 849.9 | 1,038.8 | 188.9 | 22.2 |
| nery | 1,919.5 | 2,286.4 | 366.9 | 19.1 |
| liances | 184.7 | 204.7 | 20.0 | 10.8 |
| mmunication equipment | 630.3 | 636.5 | 6.2 | 1.0 |
| hinery, n.e.c. | 1,104.5 | 1,445.2 | 340.7 | 30.8 |
| uipment | 1,907.0 | 2,224.7 | 317.7 | 16.7 |
| equipment | 804.6 | 1,028.8 | 224.2 | 27.9 |
| rts | 665.9 | 561.9 | -104.0 | -15.6 |
| lding, repair | 275.6 | 419.3 | 143.7 | 52.1 |
| ment | 50.6 | 55.4 | 4.8 | 9.5 |
| g | 85.2 | 118.2 | 33.0 | 38.7 |
| llaneous transportation equipment | 25.1 | 41.0 | 15.9 | 63.3 |
| entific instruments | 453.9 | 600.6 | 146.7 | 32.3 |
| ruments | 177.3 | 229.0 | 51.7 | 29.2 |
| h services supplies | 136.4 | 181.3 | 44.9 | 32.9 |
| nt and supplies | 108.9 | 152.4 | 43.5 | 39.9 |
| lock devices | 31.3 | 37.9 | 6.6 | 21.1 |
| nufacturing | 435.5 | 460.5 | 25.0 | 5.7 |
| | | | | |
| | 8,225.0 | 9,249.0 | 1,024.0 | 12.4 |
| products | 1,784.1 | 1,777.4 | -6.7 | -0.4 |
| | 344.2 | 363.6 | 19.4 | 5.6 |
| | 244.6 | 175.3 | -69.3 | -28.3 |
| reserving | 284.1 | 336.3 | 52.2 | 18.4 |
| ducts | 138.1 | 138.9 | 0.8 | 0.6 |
| ts | 273.6 | 244.4 | -29.2 | -10.7 |
| products | 82.7 | 86.4 | 3.7 | 4.5 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
(IN THOUSANDS)

| Industry | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Beverage industries | 236.1 | 248.5 | 12.4 |
| Miscellaneous food preparation | 180.7 | 183.8 | 3.1 |
| Tobacco manufacturing | 81.7 | 68.1 | -13.6 |
| Textile mill products | 978.4 | 1,038.9 | 60.5 |
| Knitting mills | 247.3 | 274.8 | 27.5 |
| Dyeing, finishing textiles | 83.2 | 90.7 | 7.5 |
| Floor coverings | 57.1 | 65.2 | 8.1 |
| Yarn, fabric mills | 515.9 | 531.1 | 15.2 |
| Miscellaneous textile mill products | 74.9 | 77.0 | 2.1 |
| Apparel, textile products | 1,392.3 | 1,582.7 | 190.4 |
| Apparel and accessories | 1,224.5 | 1,364.9 | 140.4 |
| Miscellaneous fabricated products | 167.8 | 217.8 | 50.0 |
| Paper and allied products | 707.4 | 853.7 | 146.3 |
| Pulp, paper, paperboard mills | 291.6 | 290.4 | -1.2 |
| Paperboard containers, boxes | 226.1 | 298.3 | 72.2 |
| Miscellaneous paper and pulp products | 189.7 | 264.9 | 75.2 |
| Printing and publishing | 1,161.1 | 1,366.4 | 205.3 |
| Newspaper publishing, printing | 417.2 | 468.8 | 51.6 |
| Printing, publishing except newspaper | 743.9 | 897.5 | 153.6 |
| Chemical and allied products | 1,031.2 | 1,235.9 | 204.7 |
| Industrial chemicals | 318.9 | 369.7 | 50.8 |
| Plastics, synthetics | 101.7 | 145.5 | 43.8 |
| Synthetic fibers | 108.6 | 125.7 | 17.1 |
| Drugs and medicines | 143.1 | 189.5 | 46.4 |
| Soaps and cosmetics | 124.8 | 156.1 | 31.3 |
| Paints, varnishes | 68.4 | 78.1 | 9.7 |
| Agricultural chemicals | 55.0 | 58.8 | 3.8 |
| Miscellaneous chemicals | 110.7 | 112.4 | 1.7 |
| Petroleum and coal products | 190.1 | 164.9 | -25.2 |
| Petroleum refining | 153.5 | 129.0 | -24.5 |
| Miscellaneous petroleum, coal products | 36.6 | 35.9 | -0.7 |
| Rubber, miscellaneous plastic products | 577.8 | 850.1 | 272.3 |
| Rubber products | 288.1 | 367.0 | 78.9 |
| Miscellaneous plastic products | 289.7 | 483.0 | 193.3 |
| Leather products | 320.7 | 310.9 | -9.8 |
| Leather tanning, finishing | 26.1 | 20.9 | -5.2 |
| Footwear, except rubber | 225.5 | 221.0 | -4.5 |
| All other leather products | 69.1 | 69.0 | -0.1 |
| Transportation, Other Public Utilities | 5,025.6 | 5,789.4 | 763.8 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| dustries | 236.1 | 248.5 | 12.4 | 5.3 |
| s food preparation | 180.7 | 183.8 | 3.1 | 1.7 |
| acturing | 81.7 | 68.1 | -13.6 | -16.6 |
| ducts | 978.4 | 1,038.9 | 60.5 | 6.2 |
| ls | 247.3 | 274.8 | 27.5 | 11.1 |
| shing textiles | 83.2 | 90.7 | 7.5 | 9.0 |
| ngs | 57.1 | 65.2 | 8.1 | 14.2 |
| mills | 515.9 | 531.1 | 15.2 | 2.9 |
| s textile mill products | 74.9 | 77.0 | 2.1 | 2.8 |
| products | 1,392.3 | 1,582.7 | 190.4 | 13.7 |
| accessories | 1,224.5 | 1,364.9 | 140.4 | 11.5 |
| s fabricated products | 167.8 | 217.8 | 50.0 | 29.8 |
| d products | 707.4 | 853.7 | 146.3 | 20.7 |
| paperboard mills | 291.6 | 290.4 | -1.2 | -0.4 |
| ontainers, boxes | 226.1 | 298.3 | 72.2 | 31.9 |
| s paper and pulp products | 189.7 | 264.9 | 75.2 | 39.6 |
| lishing | 1,161.1 | 1,366.4 | 205.3 | 17.7 |
| ublishing, printing | 417.2 | 468.8 | 51.6 | 12.4 |
| lishing except newspaper | 743.9 | 897.5 | 153.6 | 20.6 |
| llied products | 1,031.2 | 1,235.9 | 204.7 | 19.9 |
| emicals | 318.9 | 369.7 | 50.8 | 15.9 |
| nthetics | 101.7 | 145.5 | 43.8 | 43.1 |
| ers | 108.6 | 125.7 | 17.1 | 15.7 |
| edicines | 143.1 | 189.5 | 46.4 | 32.4 |
| smetics | 124.8 | 156.1 | 31.3 | 25.1 |
| shes | 68.4 | 78.1 | 9.7 | 14.2 |
| chemicals | 55.0 | 58.8 | 3.8 | 6.9 |
| s chemicals | 110.7 | 112.4 | 1.7 | 1.5 |
| oal products | 190.1 | 164.9 | -25.2 | -13.3 |
| fining | 153.5 | 129.0 | -24.5 | -16.0 |
| s petroleum, coal products | 36.6 | 35.9 | -0.7 | -1.9 |
| aneous plastic products | 577.8 | 850.1 | 272.3 | 47.1 |
| cts | 288.1 | 367.0 | 78.9 | 27.4 |
| s plastic products | 289.7 | 483.0 | 193.3 | 66.7 |
| s | 320.7 | 310.9 | -9.8 | -3.1 |
| ing, finishing | 26.1 | 20.9 | -5.2 | -19.9 |
| cept rubber | 225.5 | 221.0 | -4.5 | -2.0 |
| ther products | 69.1 | 69.0 | -0.1 | -0.1 |
| Public Utilities | 5,025.6 | 5,789.4 | 763.8 | 15.2 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| Industry | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Transportation, Total | 2,867.6 | 3,266.9 | 399.3 |
| Railroads railway express | 615.2 | 440.9 | -174.3 |
| Local, interurban transit | 385.5 | 463.9 | 78.4 |
| Street railways, bus line | 289.8 | 373.8 | 84.0 |
| Taxicab service | 95.7 | 90.1 | -5.6 |
| Trucking and warehousing | 1,162.9 | 1,511.1 | 348.2 |
| Trucking services | 1,074.4 | 1,423.6 | 349.2 |
| Warehousing and storage | 88.5 | 87.5 | -1.0 |
| Water transportation | 236.2 | 245.6 | 9.4 |
| Air transportation | 344.0 | 472.0 | 128.0 |
| Pipelines | 16.9 | 13.2 | -3.7 |
| Transportation services | 106.9 | 120.2 | 13.3 |
| | | | |
| Communications, Utilities, Sanitary | 2,158.0 | 2,522.5 | 364.5 |
| Communications | 1,081.7 | 1,251.2 | 169.5 |
| Telephone (wire and radio) | 904.6 | 1,051.3 | 146.7 |
| Telegraph, miscellaneous communication services | 47.5 | 54.4 | 6.9 |
| Radio broadcasting, TV | 129.6 | 145.5 | 15.9 |
| Utilities, sanitary services | 1,076.3 | 1,271.3 | 195.0 |
| Electric light and power | 327.0 | 362.2 | 35.2 |
| Electric-gas utilities | 196.0 | 201.6 | 5.6 |
| Gas, steam supply systems | 166.1 | 171.3 | 5.2 |
| Water supply | 133.0 | 183.8 | 50.8 |
| Sanitary services | 247.5 | 343.1 | 95.6 |
| Other utilities, n.e.c. | 6.7 | 9.2 | 2.5 |
| | | | |
| **Wholesale and Retail Trade** | **16,366.6** | **20,371.9** | **4,005.3** |
| Wholesale Trade | 3,937.4 | 4,733.5 | 796.1 |
| Wholesale, except miscellaneous wholesale | 2,644.1 | 3,284.9 | 640.8 |
| Motor vehicles and equipment | 332.5 | 484.5 | 152.0 |
| Drugs, chemicals, allied products | 233.3 | 285.2 | 51.9 |
| Dry goods and apparel | 157.0 | 175.8 | 18.8 |
| Food and related products | 581.6 | 605.8 | 24.2 |
| Farm products - raw materials | 104.8 | 90.8 | -14.0 |
| Electrical goods | 316.8 | 472.1 | 155.3 |
| Hardware, plumbing | 171.1 | 189.1 | 18.0 |
| Machinery equipment, supplies | 747.0 | 961.5 | 234.5 |
| Miscellaneous wholesale trade | 1,293.2 | 1,448.6 | 155.4 |
| Metals and minerals, n.e.c. | 134.4 | 152.2 | 17.8 |
| Petroleum products | 200.3 | 230.9 | 30.6 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| otal | 2,867.6 | 3,266.9 | 399.3 | 13.9 |
| vay express | 615.2 | 440.9 | -174.3 | -28.3 |
| an transit | 385.5 | 463.9 | 78.4 | 20.3 |
| ays, bus line | 289.8 | 373.8 | 84.0 | 29.0 |
| vice | 95.7 | 90.1 | -5.6 | -5.0 |
| varehousing | 1,162.9 | 1,511.1 | 348.2 | 29.9 |
| rvices | 1,074.4 | 1,423.6 | 349.2 | 32.5 |
| and storage | 88.5 | 87.5 | -1.0 | -1.1 |
| ation | 236.2 | 245.6 | 9.4 | 4.0 |
| ion | 344.0 | 472.0 | 128.0 | 37.2 |
| | 16.9 | 13.2 | -3.7 | -21.9 |
| services | 106.9 | 120.2 | 13.3 | 12.4 |
| Utilities, Sanitary | 2,158.0 | 2,522.5 | 364.5 | 16.9 |
| s | 1,081.7 | 1,251.2 | 169.5 | 15.7 |
| wire and radio) | 904.6 | 1,051.3 | 146.7 | 16.2 |
| niscellaneous communication services | 47.5 | 54.4 | 6.9 | 14.5 |
| casting, TV | 129.6 | 145.5 | 15.9 | 12.3 |
| ary services | 1,076.3 | 1,271.3 | 195.0 | 18.1 |
| t and power | 327.0 | 362.2 | 35.2 | 10.8 |
| utilities | 196.0 | 201.6 | 5.6 | 2.9 |
| supply systems | 166.1 | 171.3 | 5.2 | 3.1 |
| y | 133.0 | 183.8 | 50.8 | 38.2 |
| vices | 247.5 | 343.1 | 95.6 | 38.6 |
| es, n.e.c. | 6.7 | 9.2 | 2.5 | 37.3 |
| **Trade** | **16,366.6** | **20,371.9** | **4,005.3** | **24.5** |
| | 3,937.4 | 4,733.5 | 796.1 | 20.2 |
| ept miscellaneous wholesale | 2,644.1 | 3,284.9 | 640.8 | 24.2 |
| es and equipment | 332.5 | 484.5 | 152.0 | 45.7 |
| icals, allied products | 233.3 | 285.2 | 51.9 | 22.2 |
| d apparel | 157.0 | 175.8 | 18.8 | 12.0 |
| d products | 581.6 | 605.8 | 24.2 | 4.2 |
| s - raw materials | 104.8 | 90.8 | -14.0 | -13.4 |
| ods | 316.8 | 472.1 | 155.3 | 49.0 |
| umbing | 171.1 | 189.1 | 18.0 | 10.5 |
| uipment, supplies | 747.0 | 981.5 | 234.5 | 31.4 |
| wholesale trade | 1,293.2 | 1,448.6 | 155.4 | 12.0 |
| inerals, n.e.c. | 134.4 | 152.2 | 17.8 | 13.2 |
| oducts | 200.3 | 230.9 | 30.6 | 15.3 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| Industry | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Scrap and waste material | 101.0 | 102.5 | 1.5 |
| Alcoholic beverages | 98.4 | 110.6 | 12.2 |
| Paper and its products | 133.0 | 150.6 | 17.6 |
| Lumber, construction materials | 160.9 | 181.6 | 20.7 |
| Wholesale, n.e.c. | 465.2 | 520.1 | 54.9 |
| Retail Trade | 12,429.3 | 15,638.4 | 3,209.1 |
| Building materials | 595.3 | 596.4 | 1.1 |
| Lumber, building materials | 363.2 | 364.1 | 0.9 |
| Hardware and farm equipment | 232.1 | 232.2 | 0.1 |
| General merchandise, total | 2,567.8 | 3,326.5 | 758.7 |
| Department, mail order | 1,562.9 | 2,098.8 | 535.9 |
| Limited price stores | 309.8 | 295.8 | -14.0 |
| Vending machine operators | 67.6 | 93.7 | 26.1 |
| Direct selling | 324.5 | 414.4 | 89.9 |
| Miscellaneous merchandise stores | 303.0 | 423.7 | 120.7 |
| Food and dairy stores | 1,959.8 | 2,407.9 | 448.1 |
| Grocery stores | 1,680.9 | 2,068.4 | 387.5 |
| Dairy product stores | 36.8 | 45.4 | 8.6 |
| Retail bakeries | 118.8 | 147.4 | 28.6 |
| Food stores, n.e.c. | 123.3 | 146.7 | 23.4 |
| Auto dealers, gas stations | 1,807.4 | 2,280.4 | 473.0 |
| Motor vehicle dealers | 767.3 | 957.0 | 189.7 |
| Tire, battery accessory | 182.1 | 264.1 | 82.0 |
| Gasoline service stations | 781.7 | 951.0 | 169.3 |
| Miscellaneous vehicle dealers | 76.3 | 108.2 | 31.9 |
| Apparel and accessories | 769.1 | 886.2 | 117.1 |
| Apparel, accessories stores | 618.5 | 707.5 | 89.0 |
| Shoe stores | 150.6 | 178.7 | 28.1 |
| Furniture and appliances | 553.3 | 602.8 | 49.5 |
| Home furnishing stores | 344.1 | 378.7 | 34.6 |
| Appliance, TV, radio stores | 209.2 | 224.0 | 14.8 |
| Eating and drinking places | 2,698.7 | 3,709.8 | 1,011.1 |
| Miscellaneous retail trade stores | 1,477.8 | 1,828.5 | 350.7 |
| Drug stores | 466.8 | 587.3 | 120.5 |
| Liquor stores | 125.7 | 163.4 | 37.7 |
| Farm, garden supply stores | 118.8 | 144.4 | 25.6 |
| Jewelry stores | 104.6 | 124.1 | 19.5 |
| Fuel and ice dealers | 116.0 | 109.2 | -6.8 |
| Retail florists | 84.8 | 123.4 | 38.6 |

## TABLE I
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| te material | 101.0 | 102.5 | 1.5 | 1.5 |
| erages | 98.4 | 110.6 | 12.2 | 12.4 |
| products | 133.0 | 150.6 | 17.6 | 13.2 |
| ruction materials | 160.9 | 181.6 | 20.7 | 12.9 |
| .c. | 465.2 | 520.1 | 54.9 | 11.8 |
| | 12,429.3 | 15,638.4 | 3,209.1 | 25.8 |
| s | 595.3 | 596.4 | 1.1 | 0.2 |
| ng materials | 363.2 | 364.1 | 0.9 | 0.2 |
| farm equipment | 232.1 | 232.2 | 0.1 | 0 |
| ise, total | 2,567.8 | 3,326.5 | 758.7 | 29.5 |
| il order | 1,562.9 | 2,098.8 | 535.9 | 34.3 |
| stores | 309.8 | 295.8 | -14.0 | -4.5 |
| ne operators | 67.6 | 93.7 | 26.1 | 38.6 |
| | 324.5 | 414.4 | 89.9 | 27.7 |
| merchandise stores | 303.0 | 423.7 | 120.7 | 39.8 |
| ores | 1,959.8 | 2,407.9 | 448.1 | 22.9 |
| | 1,680.9 | 2,068.4 | 387.5 | 23.1 |
| stores | 36.8 | 45.4 | 8.6 | 23.4 |
| s | 118.8 | 147.4 | 28.6 | 24.1 |
| .e.c. | 123.3 | 146.7 | 23.4 | 19.0 |
| stations | 1,807.4 | 2,280.4 | 473.0 | 26.2 |
| ealers | 767.3 | 957.0 | 189.7 | 24.7 |
| ccessory | 182.1 | 264.1 | 82.0 | 45.0 |
| ce stations | 781.7 | 951.0 | 169.3 | 21.7 |
| vehicle dealers | 76.3 | 108.2 | 31.9 | 41.8 |
| sories | 769.1 | 886.2 | 117.1 | 15.2 |
| sories stores | 618.5 | 707.5 | 89.0 | 14.4 |
| | 150.6 | 178.7 | 28.1 | 18.7 |
| iances | 553.3 | 602.8 | 49.5 | 8.9 |
| g stores | 344.1 | 378.7 | 34.6 | 10.1 |
| radio stores | 209.2 | 224.0 | 14.8 | 7.1 |
| g places | 2,698.7 | 3,709.8 | 1,011.1 | 37.5 |
| il trade stores | 1,477.8 | 1,828.5 | 350.7 | 23.7 |
| | 466.8 | 587.3 | 120.5 | 25.8 |
| | 125.7 | 163.4 | 37.7 | 30.0 |
| upply stores | 118.8 | 144.4 | 25.6 | 21.5 |
| | 104.6 | 124.1 | 19.5 | 18.6 |
| ealers | 116.0 | 109.2 | -6.8 | -5.9 |
| | 84.8 | 123.4 | 38.6 | 45.5 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| Industry | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Miscellaneous retail trade stores | 461.1 | 576.6 | 115.5 |
| **Finance, Insurance, Real Estate** | 3,820.6 | 5,071.5 | 1,250.9 |
| Finance, Total | 1,613.9 | 2,323.6 | 709.7 |
| Banking | 990.8 | 1,436.0 | 445.2 |
| Credit agencies | 358.0 | 487.8 | 129.8 |
| Stock brokers, investment | 265.1 | 399.8 | 134.7 |
| Insurance | 1,350.9 | 1,661.2 | 310.3 |
| Real Estate, including law insurance | 855.8 | 1,086.8 | 231.0 |
| **Services, Total** | 20,651.5 | 27,798.7 | 7,147.2 |
| Hotels and Lodging Places | 836.1 | 1,120.6 | 284.5 |
| Hotels and motels | 701.3 | 919.2 | 217.9 |
| Lodging places, except hotels | 134.8 | 201.4 | 66.6 |
| Other Personal Services | 1,476.0 | 1,509.1 | 33.1 |
| Laundry, cleaning | 602.0 | 576.1 | -25.9 |
| Beauty shops | 470.5 | 517.8 | 47.3 |
| Barber shops | 157.1 | 162.0 | 4.9 |
| Shoe repair shops | 29.0 | 28.5 | -0.5 |
| Dressmaking shops | 38.9 | 37.6 | -1.3 |
| Other personal services | 178.5 | 187.1 | 8.6 |
| Miscellaneous Business Services | 1,648.7 | 2,901.9 | 1,253.2 |
| Advertising | 130.3 | 150.4 | 20.1 |
| Business management services | 181.4 | 314.1 | 132.7 |
| Commercial R and D | 87.6 | 166.2 | 78.6 |
| Computer programming | 112.3 | 213.0 | 100.7 |
| Detective and protective | 139.1 | 261.5 | 122.4 |
| Employment, temporary help | 215.9 | 405.6 | 189.7 |
| Services buildings | 303.3 | 528.4 | 225.1 |
| Other miscellaneous services | 478.8 | 862.9 | 384.1 |
| Automobile Repair Services | 515.3 | 722.3 | 207.0 |
| Auto repair | 345.2 | 451.8 | 106.6 |
| Auto services, except repair | 170.1 | 270.5 | 100.4 |
| Other Repair Services | 328.9 | 386.9 | 58.0 |
| Electric repair shops | 129.5 | 157.4 | 27.9 |
| Other repair services | 199.4 | 229.5 | 30.1 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| us retail trade stores | 461.1 | 576.6 | 115.5 | 25.0 |
| **eal Estate** | **3,820.6** | **5,071.5** | **1,250.9** | **32.7** |
| | 1,613.9 | 2,323.6 | 709.7 | 44.0 |
| | 990.8 | 1,436.0 | 445.2 | 44.9 |
| | 358.0 | 487.8 | 129.8 | 36.3 |
| nvestment | 265.1 | 399.8 | 134.7 | 50.8 |
| | 1,350.9 | 1,661.2 | 310.3 | 23.0 |
| ding law insurance | 855.8 | 1,086.8 | 231.0 | 27.0 |
| | **20,651.5** | **27,798.7** | **7,147.2** | **34.6** |
| g Places | 836.1 | 1,120.6 | 284.5 | 34.0 |
| els | 701.3 | 919.2 | 217.9 | 31.1 |
| , except hotels | 134.8 | 201.4 | 66.6 | 49.4 |
| vices | 1,476.0 | 1,509.1 | 33.1 | 2.2 |
| ing | 602.0 | 576.1 | -25.9 | -4.3 |
| | 470.5 | 517.8 | 47.3 | 10.1 |
| | 157.1 | 162.0 | 4.9 | 3.1 |
| ps | 29.0 | 28.5 | -0.5 | -1.7 |
| ops | 38.9 | 37.6 | -1.3 | -3.3 |
| services | 178.5 | 187.1 | 8.6 | 4.8 |
| iness Services | 1,648.7 | 2,901.9 | 1,253.2 | 76.0 |
| | 130.3 | 150.4 | 20.1 | 15.4 |
| ement services | 181.4 | 314.1 | 132.7 | 73.2 |
| nd D | 87.6 | 166.2 | 78.6 | 89.7 |
| mming | 112.3 | 213.0 | 100.7 | 89.7 |
| rotective | 139.1 | 261.5 | 122.4 | 88.0 |
| nporary help | 215.9 | 405.6 | 189.7 | 87.9 |
| gs | 303.3 | 528,4 | 225.1 | 74.2 |
| eous services | 478.8 | 862.9 | 384.1 | 80.2 |
| Services | 515.3 | 722.3 | 207.0 | 40.2 |
| | 345.2 | 451.8 | 106.6 | 30.9 |
| xcept repair | 170.1 | 270.5 | 100.4 | 59.0 |
| ces | 328.9 | 386.9 | 58.0 | 17.6 |
| hops | 129.5 | 157.4 | 27.9 | 21.5 |
| vices | 199.4 | 229.5 | 30.1 | 15.1 |

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| Industry | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Motion Pictures, Theaters | 244.5 | 313.7 | 69.2 |
| Miscellaneous Entertainment | 429.9 | 616.3 | 186.4 |
| Bowling alleys, billiards | 93.1 | 95.5 | 2.4 |
| Miscellaneous entertainment | 336.8 | 520.8 | 184.0 |
| Medical, Other Health | 4,662.5 | 7,107.7 | 2,445.2 |
| Offices of physicians | 579.1 | 954.1 | 375.0 |
| Offices of dentists | 261.6 | 369.5 | 107.9 |
| Offices of chiropractors | 23.5 | 25.7 | 2.2 |
| Hospitals | 2,962.4 | 4,306.0 | 1,343.6 |
| Convalescent institutions | 508.5 | 937.3 | 428.8 |
| Health practitioners, n.e.c. | 49.7 | 64.2 | 14.5 |
| Health services, n.e.c. | 277.8 | 450.9 | 173.1 |
| Legal Services | 404.2 | 512.1 | 107.9 |
| Educational Services | 6,024.1 | 7,992.9 | 1,968.8 |
| Elementary, secondary | 4,110.0 | 5,120.8 | 1,010.8 |
| Colleges and universities | 1,575.9 | 2,270.5 | 694.6 |
| Libraries | 81.6 | 119.6 | 38.0 |
| Educational services, n.e.c. | 256.7 | 482.0 | 225.3 |
| Museums, Art Galleries, Zoos | 29.0 | 44.9 | 15.9 |
| Nonprofit Organization | 1,432.6 | 1,945.1 | 512.5 |
| Religious organizations | 572.6 | 671.6 | 99.0 |
| Welfare services | 429.5 | 672.9 | 243.4 |
| Residential welfare | 48.5 | 61.2 | 12.7 |
| Nonprofit membership | 382.0 | 539.4 | 157.4 |
| Private Households | 1,780.5 | 1,441.0 | -339.5 |
| Other Professional and Related Services | 839.2 | 1,184.2 | 345.0 |
| Engineering and architectural services | 321.6 | 443.4 | 121.8 |
| Accounting, auditing | 305.8 | 454.7 | 148.9 |
| Miscellaneous professional services | 211.8 | 286.2 | 74.4 |
| Government, Total | 4,259.4 | 5,219.9 | 960.5 |
| Federal Public Administration | 2,262.8 | 2,433.6 | 170.8 |
| Postal services | 712.8 | 778.7 | 65.9 |
| Federal public administration | 1,550.0 | 1,654.8 | 104.8 |
| State Public Administration | 615.8 | 875.8 | 260.0 |
| Local Public Administration | 1,380.8 | 1,910.5 | 529.7 |

Footnote appear on the next page.

# TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| eaters | 244.5 | 313.7 | 69.2 | 28.3 |
| rtainment | 429.9 | 616.3 | 186.4 | 43.4 |
| billiards | 93.1 | 95.5 | 2.4 | 2.6 |
| tertainment | 336.8 | 520.8 | 184.0 | 54.6 |
| th | 4,662.5 | 7,107.7 | 2,445.2 | 52.4 |
| ians | 579.1 | 954.1 | 375.0 | 64.8 |
| ts | 261.6 | 369.5 | 107.9 | 41.2 |
| ractors | 23.5 | 25.7 | 2.2 | 9.4 |
| | 2,962.4 | 4,306.0 | 1,343.6 | 45.4 |
| titutions | 508.5 | 937.3 | 428.8 | 84.3 |
| ers, n.e.c. | 49.7 | 64.2 | 14.5 | 29.2 |
| n.e.c. | 277.8 | 450.9 | 173.1 | 62.3 |
| | 404.2 | 512.1 | 107.9 | 26.7 |
| s | 6,024.1 | 7,992.9 | 1,968.8 | 32.7 |
| ndary | 4,110.0 | 5,120.8 | 1,010.8 | 24.6 |
| versities | 1,575.9 | 2,270.5 | 694.6 | 44.1 |
| | 81.6 | 119.6 | 38.0 | 46.6 |
| ices, n.e.c. | 256.7 | 482.0 | 225.3 | 87.8 |
| ies, Zoos | 29.0 | 44.9 | 15.9 | 54.8 |
| on | 1,432.6 | 1,945.1 | 512.5 | 35.8 |
| ations | 572.6 | 671.6 | 99.0 | 17.3 |
| | 429.5 | 672.9 | 243.4 | 56.7 |
| re | 48.5 | 61.2 | 12.7 | 26.2 |
| bership | 382.0 | 539.4 | 157.4 | 41.2 |
| | 1,780.5 | 1,441.0 | -339.5 | -19.1 |
| nd Related Services | 839.2 | 1,184.2 | 345.0 | 41.1 |
| rchitectural services | 321.6 | 443.4 | 121.8 | 37.9 |
| ing | 305.8 | 454.7 | 148.9 | 48.7 |
| fessional services | 211.8 | 286.2 | 74.4 | 35.1 |
| | 4,259.4 | 5,219.9 | 960.5 | 22.6 |
| nistration | 2,262.8 | 2,433.6 | 170.8 | 7.5 |
| | 712.8 | 778.7 | 65.9 | 9.2 |
| ministration | 1,550.0 | 1,654.8 | 104.8 | 6.8 |
| tration | 615.8 | 875.8 | 260.0 | 42.2 |
| stration | 1,380.8 | 1,910.5 | 529.7 | 38.4 |

next page.

## TABLE 1
## NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

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1/ Data include self-employed persons, unpaid family workers, and wage and salary workers. Persons holding two or more jobs are shown o of their primary job. Following the classifications system used in the 1970 Census of Population, government employment was separate administration and other activities such as education, hospitals, public utilities, and government construction and manufacturing. The l combined with their counterparts in the private sector.

SOURCE: Bureau of Labor Statistics

# TABLE 1
# NATIONAL TOTAL 1/ EMPLOYMENT BY INDUSTRY, 1970 AND PROJECTED TO 1980 - continued
## (IN THOUSANDS)

employed persons, unpaid family workers, and wage and salary workers. Persons holding two or more jobs are shown only in the industry
b. Following the classifications system used in the 1970 Census of Population, government employment was separated into public
other activities such as education, hospitals, public utilities, and government construction and manufacturing. The latter have been
ir counterparts in the private sector.

abor Statistics

# TABLE 2
# NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION
# (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| **Total, All Occupations** | 78,627.3 | 95,817.0 | 17,189.7 |
| | | | |
| **Professional, Technical, Kindred** | 10,939.3 | 14,751.2 | 3,811.9 |
| Engineers, Technical | 1,104.0 | 1,415.5 | 311.5 |
| Engineers, aero-astronautic | 61.0 | 70.0 | 9.0 |
| Engineers, chemical | 50.0 | 57.0 | 7.0 |
| Engineers, civil | 167.0 | 205.0 | 38.0 |
| Engineers, electrical | 281.0 | 365.0 | 84.0 |
| Engineers, industrial | 159.0 | 223.0 | 64.0 |
| Engineers, mechanical | 185.0 | 225.0 | 40.0 |
| Engineers, metallurgical | 15.0 | 19.4 | 4.4 |
| Engineers, mining | 5.0 | 4.7 | -0.3 |
| Engineers, petroleum | 12.0 | 13.4 | 1.4 |
| Engineers, sales | 39.0 | 46.0 | 7.0 |
| Engineers, other | 130.0 | 187.0 | 57.0 |
| | | | |
| Life and Physical Scientists | 207.0 | 275.7 | 68.7 |
| Agricultural scientists | 13.0 | 15.0 | 2.0 |
| Atmospheric, space scientists | 6.0 | 8.0 | 2.0 |
| Biological scientists | 29.0 | 39.0 | 10.0 |
| Chemists | 100.0 | 150.0 | 41.0 |
| Geologists | 24.0 | 30.0 | 6.0 |
| Marine scientists | 3.0 | 5.0 | 2.0 |
| Physicists and astronomers | 21.0 | 26.5 | 5.5 |
| Life, physical scientists, n.e.c. | 2.0 | 2.2 | 0.2 |
| | | | |
| Mathematical Specialists | 34.0 | 48.7 | 14.7 |
| Actuaries | 5.0 | 7.2 | 2.2 |
| Mathematicians | 8.0 | 11.5 | 3.5 |
| Statisticians | 21.0 | 30.0 | 9.0 |
| | | | |
| Engineers, Science Technicians | 865.0 | 1,278.5 | 413.5 |
| Agricultural, biological technicians, except health | 36.0 | 52.0 | 16.0 |
| Chemical technicians | 77.9 | 94.9 | 17.0 |
| Draftsmen | 316.0 | 425.0 | 109.0 |
| Electrical, electronic technicians | 154.0 | 237.0 | 83.0 |
| Industrial engineering technicians | 20.0 | 23.0 | 3.0 |
| Mathematical technicians | 1.0 | 1.0 | 0 |

### TABLE 2
### NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION
### (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| | 78,627.3 | 95,817.0 | 17,189.7 | 21.9 |
| dred | 10,939.3 | 14,751.2 | 3,811.9 | 34.8 |
| | 1,104.0 | 1,415.5 | 311.5 | 28.2 |
| utic | 61.0 | 70.0 | 9.0 | 14.8 |
| | 50.0 | 57.0 | 7.0 | 14.0 |
| | 167.0 | 205.0 | 38.0 | 22.8 |
| | 281.0 | 365.0 | 84.0 | 29.9 |
| | 159.0 | 223.0 | 64.0 | 40.3 |
| | 185.0 | 225.0 | 40.0 | 21.6 |
| l | 15.0 | 19.4 | 4.4 | 29.3 |
| | 5.0 | 4.7 | -0.3 | -06.0 |
| | 12.0 | 13.4 | 1.4 | 11.7 |
| | 39.0 | 46.0 | 7.0 | 17.9 |
| | 130.0 | 187.0 | 57.0 | 43.8 |
| s | 207.0 | 275.7 | 68.7 | 33.2 |
| | 13.0 | 15.0 | 2.0 | 15.4 |
| ntists | 6.0 | 8.0 | 2.0 | 3.3 |
| | 29.0 | 39.0 | 10.0 | 34.5 |
| | 100.0 | 150.0 | 41.0 | 37.6 |
| | 24.0 | 30.0 | 6.0 | 25.0 |
| | 3.0 | 5.0 | 2.0 | 66.7 |
| ers | 21.0 | 26.5 | 5.5 | 26.2 |
| , n.e.c. | 2.0 | 2.2 | 0.2 | 10.0 |
| | 34.0 | 48.7 | 14.7 | 43.2 |
| | 5.0 | 7.2 | 2.2 | 44.0 |
| | 8.0 | 11.5 | 3.5 | 43.8 |
| | 21.0 | 30.0 | 9.0 | 42.9 |
| ians | 865.0 | 1,278.5 | 413.5 | 47.8 |
| echnicians, except health | 36.0 | 52.0 | 16.0 | 44.4 |
| | 77.9 | 94.9 | 17.0 | 21.8 |
| | 316.0 | 425.0 | 109.0 | 34.5 |
| hnicians | 154.0 | 237.0 | 83.0 | 53.9 |
| hnicians | 20.0 | 23.0 | 3.0 | 15.0 |
| | 1.0 | 1.0 | 0 | 0 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Mechanical engineering technicians | 12.0 | 14.5 | 2.5 |
| Surveyors | 59.0 | 76.0 | 17.0 |
| Engineering, science technicians, n.e.c. | 190.0 | 355.0 | 165.0 |
| Medical Workers, except Technicians | 1,369.0 | 1,944.2 | 575.2 |
| Chiropractors | 16.0 | 18.2 | 2.2 |
| Dentists | 94.1 | 130.0 | 35.9 |
| Dietitians | 30.0 | 42.0 | 12.0 |
| Optometrists | 18.0 | 22.0 | 4.0 |
| Pharmacists | 129.0 | 156.9 | 27.9 |
| Physicians, medical and osteopaths | 290.0 | 405.0 | 115.0 |
| Podiatrists | 7.0 | 8.3 | 1.3 |
| Registered nurses | 680.0 | 980.0 | 300.0 |
| Therapists | 81.6 | 147.0 | 65.4 |
| Veterinarians | 22.6 | 33.0 | 10.4 |
| Other medical and health | 1.0 | 1.7 | 0.7 |
| Health Technologists and Technicians | 273.8 | 501.8 | 228.0 |
| Clinical lab technologists and technicians | 130.0 | 240.0 | 110.0 |
| Dental hygienists | 16.0 | 34.0 | 18.0 |
| Health record technologists and technicians | 12.3 | 30.0 | 17.7 |
| Radiologic technologists and technicians | 52.0 | 81.0 | 29.0 |
| Other health technologists and technicians | 60.0 | 110.0 | 50.0 |
| Technicians, except Health | 155.0 | 231.1 | 76.1 |
| Airplane pilots | 49.0 | 67.0 | 18.0 |
| Air traffic controllers | 25.0 | 30.0 | 5.0 |
| Embalmers | 5.0 | 4.1 | -0.9 |
| Flight engineers | 6.0 | 9.0 | 3.0 |
| Radio operators | 30.0 | 40.0 | 10.0 |
| Tool programers, numerical | 3.0 | 4.0 | 1.0 |
| Other technicians, except health | 37.0 | 77.0 | 40.0 |
| Therapy assistants | 3.5 | 6.8 | 3.3 |
| Computer Specialists | 279.2 | 415.0 | 135.8 |
| Computer programers | 176.5 | 250.0 | 73.5 |
| Computer systems analysts | 88.1 | 142.0 | 53.9 |
| Other computer specialists | 14.6 | 23.0 | 8.4 |

# TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| ering technicians | 12.0 | 14.5 | 2.5 | 20.8 |
| | 59.0 | 76.0 | 17.0 | 28.8 |
| ce technicians, n.e.c. | 190.0 | 355.0 | 165.0 | 86.8 |
| ept Technicians | 1,369.0 | 1,944.2 | 575.2 | 42.0 |
| | 16.0 | 18.2 | 2.2 | 13.8 |
| | 94.1 | 130.0 | 35.9 | 38.2 |
| | 30.0 | 42.0 | 12.0 | 40.0 |
| | 18.0 | 22.0 | 4.0 | 22.2 |
| | 129.0 | 156.9 | 27.9 | 21.6 |
| al and osteopaths | 290.0 | 405.0 | 115.0 | 39.7 |
| | 7.0 | 8.3 | 1.3 | 18.6 |
| | 680.0 | 980.0 | 300.0 | 44.1 |
| | 81.6 | 147.0 | 65.4 | 80.1 |
| | 22.6 | 33.0 | 10.4 | 46.0 |
| health | 1.0 | 1.7 | 0.7 | 70.0 |
| and Technicians | 273.8 | 501.8 | 228.0 | 83.3 |
| logists and technicians | 130.0 | 240.0 | 110.0 | 84.6 |
| | 16.0 | 34.0 | 18.0 | 112.5 |
| ologists and technicians | 12.3 | 30.0 | 17.7 | 143.9 |
| gists and technicians | 52.0 | 81.0 | 29.0 | 55.8 |
| logists and technicians | 60.0 | 110.0 | 50.0 | 83.3 |
| ealth | 155.0 | 231.1 | 76.1 | 49.1 |
| | 49.0 | 67.0 | 18.0 | 36.7 |
| rs | 25.0 | 30.0 | 5.0 | 20.0 |
| | 5.0 | 4.1 | -0.9 | -18.0 |
| | 6.0 | 9.0 | 3.0 | 50.0 |
| | 30.0 | 40.0 | 10.0 | 33.3 |
| merical | 3.0 | 4.0 | 1.0 | 33.3 |
| except health | 37.0 | 77.0 | 40.0 | 108.1 |
| | 3.5 | 6.8 | 3.3 | 94.3 |
| | 279.2 | 415.0 | 135.8 | 48.6 |
| s | 176.5 | 250.0 | 73.5 | 41.6 |
| nalysts | 88.1 | 142.0 | 53.9 | 61.2 |
| cialists | 14.6 | 23.0 | 8.4 | 57.5 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Social Scientists | 115.2 | 206.5 | 91.3 |
| Economists | 66.0 | 110.0 | 44.0 |
| Political scientists | 1.9 | 3.5 | 1.6 |
| Psychologists | 30.0 | 60.5 | 30.5 |
| Sociologists | 1.3 | 2.0 | 0.7 |
| Urban and regional planners | 9.0 | 18.0 | 9.0 |
| Other social scientists | 7.0 | 12.5 | 5.5 |
| Teachers | 3,337.5 | 3,927.3 | 589.8 |
| Adult education teachers | 58.0 | 85.0 | 27.0 |
| Agriculture teachers | 5.0 | 6.2 | 1.2 |
| Art, drama, music teachers | 30.0 | 44.1 | 14.1 |
| Atmospheric, earth, marine teachers | 4.5 | 7.5 | 3.0 |
| Biology teachers | 21.0 | 32.6 | 11.6 |
| Business, commerce teachers | 14.0 | 22.1 | 8.1 |
| Chemistry teachers | 16.0 | 18.5 | 2.5 |
| Coaches, physical education teachers | 17.0 | 21.2 | 4.2 |
| Economics teachers | 10.0 | 14.1 | 4.1 |
| Education teachers | 7.2 | 8.8 | 1.6 |
| Elementary school teachers | 1,400.0 | 1,535.0 | 135.0 |
| Engineering teachers | 17.0 | 20.3 | 3.3 |
| English teachers | 39.0 | 49.4 | 10.4 |
| Foreign language teachers | 20.7 | 32.6 | 11.9 |
| Health specialties teachers | 28.0 | 54.7 | 26.7 |
| History teachers | 16.0 | 17.6 | 1.6 |
| Home economics teachers | 4.2 | 6.2 | 2.0 |
| Law teachers | 2.9 | 4.9 | 2.0 |
| Mathematics teachers | 26.0 | 37.5 | 11.5 |
| Physics teachers | 14.0 | 13.2 | -0.8 |
| Preschool and kindergarten teachers | 133.0 | 160.0 | 27.0 |
| Psychology teachers | 13.0 | 22.9 | 9.9 |
| Secondary school teachers | 1,037.0 | 1,050.0 | 13.0 |
| Sociology teachers | 7.0 | 15.0 | 8.0 |
| Social science teachers, n.e.c. | 12.0 | 20.3 | 8.3 |
| Miscellaneous college and university teachers | 19.0 | 32.2 | 13.2 |
| College and university teachers, n.e.c. | 148.0 | 233.0 | 85.0 |
| Theology teachers | 5.0 | 8.8 | 3.8 |
| Trade, industrial and technical teachers | 3.0 | 5.6 | 2.6 |
| Teachers, n.e.c., except college and university teachers | 209.9 | 348.0 | 138.1 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

|  | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
|  | 115.2 | 206.5 | 91.3 | 79.3 |
|  | 66.0 | 110.0 | 44.0 | 66.7 |
|  | 1.9 | 3.5 | 1.6 | 84.2 |
|  | 30.0 | 60.5 | 30.5 | 101.7 |
|  | 1.3 | 2.0 | 0.7 | 53.8 |
| planners | 9.0 | 18.0 | 9.0 | 100.0 |
| ists | 7.0 | 12.5 | 5.5 | 78.6 |
|  | 3,337.5 | 3,927.3 | 589.8 | 17.7 |
| chers | 58.0 | 85.0 | 27.0 | 46.6 |
| s | 5.0 | 6.2 | 1.2 | 24.0 |
| eachers | 30.0 | 44.1 | 14.1 | 47.0 |
| , marine teachers | 4.5 | 7.5 | 3.0 | 66.7 |
|  | 21.0 | 32.6 | 11.6 | 55.2 |
| e teachers | 14.0 | 22.1 | 8.1 | 57.9 |
|  | 16.0 | 18.5 | 2.5 | 15.6 |
| education teachers | 17.0 | 21.2 | 4.2 | 24.7 |
| s | 10.0 | 14.1 | 4.1 | 41.0 |
|  | 7.2 | 8.8 | 1.6 | 22.2 |
| teachers | 1,400.0 | 1,535.0 | 135.0 | 9.6 |
| rs | 17.0 | 20.3 | 3.3 | 19.4 |
|  | 39.0 | 49.4 | 10.4 | 26.7 |
| eachers | 20.7 | 32.6 | 11.9 | 57.5 |
| teachers | 28.0 | 54.7 | 26.7 | 95.4 |
|  | 16.0 | 17.6 | 1.6 | 10.0 |
| achers | 4.2 | 6.2 | 2.0 | 47.6 |
|  | 2.9 | 4.9 | 2.0 | 69.0 |
| rs | 26.0 | 37.5 | 11.5 | 44.2 |
|  | 14.0 | 13.2 | -0.8 | -5.7 |
| ergarten teachers | 133.0 | 160.0 | 27.0 | 20.3 |
| rs | 13.0 | 22.9 | 9.9 | 76.2 |
| eachers | 1,037.0 | 1,050.0 | 13.0 | 1.3 |
|  | 7.0 | 15.0 | 8.0 | 114.3 |
| hers, n.e.c. | 12.0 | 20.3 | 8.3 | 69.2 |
| ge and university teachers | 19.0 | 32.2 | 13.2 | 69.5 |
| sity teachers, n.e.c. | 148.0 | 233.0 | 85.0 | 57.4 |
|  | 5.0 | 8.8 | 3.8 | 76.0 |
| nd technical teachers | 3.0 | 5.6 | 2.6 | 86.7 |
| xcept college and university teachers | 209.9 | 348.0 | 138.1 | 65.8 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| **Writers, Artists, Entertainers** | 821.6 | 1,135.8 | 314.2 |
| Actors | 10.7 | 13.6 | 2.9 |
| Athletes and kindred workers | 55.7 | 83.0 | 27.3 |
| Authors | 26.0 | 30.0 | 4.0 |
| Dancers | 6.0 | 8.3 | 2.3 |
| Designers | 120.0 | 164.0 | 44.0 |
| Editors and reporters | 150.0 | 205.0 | 55.0 |
| Musicians and composers | 105.0 | 135.0 | 30.0 |
| Painters and sculptors | 105.0 | 146.0 | 41.0 |
| Photographers | 70.2 | 88.0 | 17.8 |
| Public relations men, writers | 82.0 | 119.0 | 37.0 |
| Radio and TV announcers | 21.0 | 24.9 | 3.9 |
| Writers, artists and entertainers, n.e.c. | 70.0 | 119.0 | 49.0 |
| **Other Professional, Technical and Kindred Workers** | 2,378.0 | 3,371.0 | 993.0 |
| Accountants | 686.0 | 875.0 | 189.0 |
| Architects | 62.0 | 91.0 | 29.0 |
| Archivists and curators | 6.0 | 9.5 | 3.5 |
| Clergymen | 228.0 | 265.0 | 37.0 |
| Religious, except clergymen | 43.0 | 50.0 | 7.0 |
| Farm management advisors | 7.0 | 6.1 | -0.9 |
| Foresters, conservationists | 43.0 | 53.5 | 10.5 |
| Home management advisors | 5.2 | 5.1 | -0.1 |
| Judges | 13.7 | 15.0 | 1.3 |
| Lawyers | 287.0 | 385.0 | 98.0 |
| Librarians | 115.0 | 145.7 | 30.7 |
| Operations, systems research | 79.0 | 135.0 | 56.0 |
| Personnel labor relations | 286.0 | 478.0 | 192.0 |
| Research workers, n.e.c. | 115.0 | 195.0 | 80.0 |
| Recreation workers | 60.0 | 92.0 | 32.0 |
| Social workers | 230.0 | 360.0 | 130.0 |
| Vocational education counselors | 112.0 | 210.0 | 98.0 |
| **Managers, Officials, Proprietors** | 7,484.0 | 10,149.0 | 2,665.0 |
| **Buyers, Sales, Loan Managers** | 1,360.0 | 1,909.9 | 549.9 |
| Bank, financial managers | 398.0 | 600.0 | 202.0 |
| Buyers, shippers, farm products | 25.0 | 20.1 | -4.9 |
| Buyers, wholesale, retail products | 155.0 | 210.0 | 55.0 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| tertainers | 821.6 | 1,135.8 | 314.2 | 38.2 |
| | 10.7 | 13.6 | 2.9 | 27.1 |
| dred workers | 55.7 | 83.0 | 27.3 | 49.0 |
| | 26.0 | 30.0 | 4.0 | 15.4 |
| | 6.0 | 8.3 | 2.3 | 38.3 |
| | 120.0 | 164.0 | 44.0 | 36.7 |
| rters | 150.0 | 205.0 | 55.0 | 36.7 |
| omposers | 105.0 | 135.0 | 30.0 | 28.6 |
| lptors | 105.0 | 146.0 | 41.0 | 39.0 |
| | 70.2 | 88.0 | 17.8 | 25.4 |
| men, writers | 82.0 | 119.0 | 37.0 | 45.1 |
| nouncers | 21.0 | 24.9 | 3.9 | 18.6 |
| nd entertainers, n.e.c. | 70.0 | 119.0 | 49.0 | 70.0 |
| Technical and Kindred Workers | 2,378.0 | 3,371.0 | 993.0 | 41.8 |
| | 686.0 | 875.0 | 189.0 | 27.6 |
| | 62.0 | 91.0 | 29.0 | 46.8 |
| rators | 6.0 | 9.5 | 3.5 | 58.3 |
| | 228.0 | 265.0 | 37.0 | 16.2 |
| clergymen | 43.0 | 50.0 | 7.0 | 16.3 |
| advisors | 7.0 | 6.1 | -0.9 | -12.9 |
| rvationists | 43.0 | 53.5 | 10.5 | 24.4 |
| t advisors | 5.2 | 5.1 | -0.1 | -1.9 |
| | 13.7 | 15.0 | 1.3 | 9.5 |
| | 287.0 | 385.0 | 98.0 | 34.1 |
| | 115.0 | 145.7 | 30.7 | 26.7 |
| ms research | 79.0 | 135.0 | 56.0 | 70.9 |
| elations | 286.0 | 478.0 | 192.0 | 67.1 |
| , n.e.c. | 115.0 | 195.0 | 80.0 | 69.6 |
| rs | 60.0 | 92.0 | 32.0 | 53.3 |
| | 230.0 | 360.0 | 130.0 | 56.6 |
| tion counselors | 112.0 | 210.0 | 98.0 | 87.5 |
| oprietors | 7,484.0 | 10,149.0 | 2,665.0 | 35.6 |
| Managers | 1,360.0 | 1,909.9 | 549.9 | 40.4 |
| nagers | 398.0 | 600.0 | 202.0 | 50.8 |
| farm products | 25.0 | 20.1 | -4.9 | -19.6 |
| , retail products | 155.0 | 210.0 | 55.0 | 35.5 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Creditmen | 68.0 | 85.8 | 17.8 |
| Purchasing agents, buyers, n.e.c. | 175.0 | 234.0 | 59.0 |
| Sales manager, retail trade | 275.0 | 390.9 | 115.9 |
| Sales manager, except retail trade | 264.0 | 369.1 | 105.1 |
| | | | |
| Administrators, Public Inspectors | 752.0 | 990.4 | 238.4 |
| Assessors, controllers, and treasurers; local public administration | 30.0 | 35.7 | 5.7 |
| Construction inspector, public | 21.0 | 26.5 | 5.5 |
| Health administrators | 100.0 | 176.1 | 76.1 |
| Inspectors, except construction and public | 89.0 | 130.0 | 41.0 |
| Officials and public administrators | 263.0 | 301.8 | 38.8 |
| Postmasters and mail supervisors | 35.0 | 31.2 | -3.8 |
| School administrators, college | 40.0 | 72.3 | 32.3 |
| School administrators, elementary and secondary | 174.0 | 216.8 | 42.8 |
| | | | |
| Other Managers, Officials and Proprietors | 5,372.0 | 7,248.7 | 1,876.7 |
| Funeral directors | 40.0 | 41.2 | 1.2 |
| Managers, superintendants, building | 100.0 | 150.3 | 50.3 |
| Office managers, n.e.c. | 288.0 | 447.4 | 159.4 |
| Officers, pilots, pursers, ship | 32.0 | 32.2 | 0.2 |
| Officials of lodges, unions | 65.0 | 82.9 | 17.9 |
| Railroad conductors | 40.0 | 36.4 | -3.6 |
| Restaurant, cafe and bar ,amager | 463.0 | 552.6 | 89.6 |
| Other managers and administrators | 4,344.0 | 5,905.7 | 1,561.7 |
| | | | |
| **Sales Workers** | 5,012.9 | 6,340.0 | 1,327.1 |
| Advertising Agents, Salesmen | 63.5 | 86.0 | 22.5 |
| Auctioneers | 5.5 | 7.0 | 1.5 |
| Demonstrators | 55.5 | 61.0 | 5.5 |
| Hucksters and Peddlers | 210.0 | 262.9 | 52.9 |
| Insurance Agents, Brokers, Etc. | 412.0 | 522.9 | 110.9 |
| Newsboys | 72.0 | 61.6 | -10.4 |
| Real Estate Agents, Brokers | 316.0 | 413.5 | 97.5 |
| Stock and Bond Salesmen | 101.8 | 140.5 | 38.7 |
| Sales Representatives, manufacturing | 394.0 | 476.1 | 82.1 |
| Sales Representatives, wholesale trade | 635.0 | 810.3 | 175.3 |
| Sales Clerks, retail trade | 2,190.0 | 2,782.1 | 592.1 |
| Salesmen, retail trade | 407.0 | 497.3 | 90.3 |
| Salesmen, service and construction | 151.2 | 218.8 | 67.6 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| | 68.0 | 85.8 | 17.8 | 26.2 |
| gents, buyers n.e.c. | 175.0 | 234.0 | 59.0 | 33.7 |
| r, retail trade | 275.0 | 390.9 | 115.9 | 42.1 |
| r, except retail trade | 264.0 | 369.1 | 105.1 | 39.8 |
| Public Inspectors | 752.0 | 990.4 | 238.4 | 31.7 |
| ontrollers, and treasurers; local public administration | 30.0 | 35.7 | 5.7 | 19.0 |
| inspector, public | 21.0 | 26.5 | 5.5 | 26.2 |
| strators | 100.0 | 176.1 | 76.1 | 76.1 |
| cept construction and public | 89.0 | 130.0 | 41.0 | 46.1 |
| public administrators | 263.0 | 301.8 | 38.8 | 14.8 |
| nd mail supervisors | 35.0 | 31.2 | -3.8 | -10.9 |
| strators, college | 40.0 | 72.3 | 32.3 | 80.8 |
| strators, elementary and secondary | 174.0 | 216.8 | 42.8 | 24.6 |
| Officials and Proprietors | 5,372.0 | 7,248.7 | 1,876.7 | 34.9 |
| ors | 40.0 | 41.2 | 1.2 | 3.0 |
| erintendants, building | 100.0 | 150.3 | 50.3 | 50.3 |
| rs, n.e.c. | 288.0 | 447.4 | 159.4 | 55.3 |
| s, pursers, ship | 32.0 | 32.2 | 0.2 | 0.6 |
| dges, unions | 65.0 | 82.9 | 17.9 | 27.5 |
| uctors | 40.0 | 36.4 | -3.6 | -9.0 |
| fe and bar ,amager | 463.0 | 552.6 | 89.6 | 19.4 |
| s and administrators | 4,344.0 | 5,905.7 | 1,561.7 | 36.0 |
| | 5,012.9 | 6,340.0 | 1,327.1 | 26.5 |
| s, Salesmen | 63.5 | 86.0 | 22.5 | 35.4 |
| | 5.5 | 7.0 | 1.5 | 27.3 |
| | 55.5 | 61.0 | 5.5 | 9.9 |
| ddlers | 210.0 | 262.9 | 52.9 | 25.2 |
| Brokers, Etc. | 412.0 | 522.9 | 110.9 | 26.9 |
| | 72.0 | 61.6 | -10.4 | -14.4 |
| s, Brokers | 316.0 | 413.5 | 97.5 | 30.9 |
| lesmen | 101.8 | 140.5 | 38.7 | 38.0 |
| ives, manufacturing | 394.0 | 476.1 | 82.1 | 20.8 |
| ives, wholesale trade | 635.0 | 810.3 | 175.3 | 27.6 |
| il trade | 2,190.0 | 2,782.1 | 592.1 | 27.0 |
| rade | 407.0 | 497.3 | 90.3 | 22.2 |
| and construction | 151.2 | 218.8 | 67.6 | 44.7 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| **Clerical Workers** | 13,732.2 | 18,100.1 | 4,367.9 |
| Stenographers, Typists and Secretaries | 3,886.1 | 5,401.6 | 1,515.5 |
| Secretaries, legal | 104.0 | 162.5 | 58.5 |
| Secretaries, medical | 79.0 | 140.2 | 61.2 |
| Secretaries, other | 2,602.1 | 3,738.9 | 1,136.8 |
| Stenographers | 128.0 | 96.0 | -32.0 |
| Typists | 973.0 | 1,264.0 | 291.0 |
| | | | |
| Office Machine Operators | 632.5 | 741.3 | 108.8 |
| Bookkeeping, billing operators | 68.5 | 85.4 | 16.9 |
| Calculating machine operators | 34.0 | 36.6 | 2.6 |
| Computer, peripheral equipment operators | 150.0 | 246.1 | 96.1 |
| Duplicating machine operators | 19.0 | 26.6 | 7.6 |
| Keypunch operators | 300.0 | 265.0 | -35.0 |
| Tabulating machine operators | 9.0 | 4.4 | -4.6 |
| Other office machine operators | 52.0 | 77.2 | 25.2 |
| | | | |
| Other Clerical Workers | 9,213.6 | 11,957.2 | 2,743.6 |
| Bank tellers | 287.0 | 400.0 | 113.0 |
| Billing clerks | 123.0 | 193.3 | 70.3 |
| Bookkeepers | 1,540.0 | 1,850.0 | 310.0 |
| Cashiers | 969.0 | 1,250.0 | 281.0 |
| Clerical assistants, social welfare workers | 1.5 | 3.0 | 1.5 |
| Clerical supervisors, n.e.c. | 192.0 | 248.8 | 56.8 |
| Collectors, bill and account | 60.0 | 85.2 | 25.2 |
| Counter clerks, except food | 309.0 | 443.2 | 134.2 |
| Dispatcher, starter, vehicle | 64.0 | 84.9 | 20.9 |
| Enumerators and interviewers | 65.0 | 65.0 | 0 |
| Estimators, investigators, n.e.c. | 329.0 | 449.7 | 120.7 |
| Expeditors, production controllers | 200.0 | 250.0 | 50.5 |
| File clerks | 270.0 | 320.0 | 50.0 |
| Insurance adjusters, examiners, and investigators | 105.0 | 136.7 | 31.7 |
| Library attendants, assistants | 120.0 | 167.0 | 47.0 |
| Mail carriers, post office | 268.0 | 285.0 | 17.0 |
| Mail handlers, except post office | 130.0 | 175.4 | 45.4 |
| Messenger and office boys | 56.0 | 56.2 | 0.2 |
| Meter readers, utilities | 37.0 | 38.4 | 1.4 |
| Payroll, time keeping clerks | 175.0 | 222.5 | 47.5 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| | 13,732.2 | 18,100.1 | 4,367.9 | 31.8 |
| ypists and Secretaries | 3,886.1 | 5,401.6 | 1,515.5 | 39.0 |
| egal | 104.0 | 162.5 | 58.5 | 56.3 |
| edical | 79.0 | 140.2 | 61.2 | 77.5 |
| ther | 2,602.1 | 3,738.9 | 1,136.8 | 43.7 |
| | 128.0 | 96.0 | -32.0 | -25.0 |
| | 973.0 | 1,264.0 | 291.0 | 29.9 |
| | | | | |
| perators | 632.5 | 741.3 | 108.8 | 17.2 |
| billing operators | 68.5 | 85.4 | 16.9 | 24.7 |
| achine operators | 34.0 | 36.6 | 2.6 | 7.6 |
| ipheral equipment operators | 150.0 | 246.1 | 96.1 | 64.1 |
| achine operators | 19.0 | 26.6 | 7.6 | 40.0 |
| ators | 300.0 | 265.0 | -35.0 | -11.7 |
| chine operators | 9.0 | 4.4 | -4.6 | -51.1 |
| achine operators | 52.0 | 77.2 | 25.2 | 48.5 |
| | | | | |
| kers | 9,213.6 | 11,957.2 | 2,743.6 | 29.8 |
| | 287.0 | 400.0 | 113.0 | 39.4 |
| | 123.0 | 193.3 | 70.3 | 57.2 |
| | 1,540.0 | 1,850.0 | 310.0 | 20.1 |
| | 969.0 | 1,250.0 | 281.0 | 29.0 |
| tants, social welfare workers | 1.5 | 3.0 | 1.5 | 100.0 |
| visors, n.e.c. | 192.0 | 248.8 | 56.8 | 29.6 |
| and account | 60.0 | 85.2 | 25.2 | 42.0 |
| except food | 309.0 | 443.2 | 134.2 | 43.4 |
| rter, vehicle | 64.0 | 84.9 | 20.9 | 32.7 |
| d interviewers | 65.0 | 65.0 | 0 | 0 |
| vestigators, n.e.c. | 329.0 | 449.7 | 120.7 | 36.7 |
| duction controllers | 200.0 | 250.0 | 50.5 | 25.3 |
| | 270.0 | 320.0 | 50.0 | 18.5 |
| sters, examiners, and investigators | 105.0 | 136.7 | 31.7 | 30.2 |
| nts, assistants | 120.0 | 167.0 | 47.0 | 39.2 |
| post office | 268.0 | 285.0 | 17.0 | 6.3 |
| except post office | 130.0 | 175.4 | 45.4 | 34.9 |
| office boys | 56.0 | 56.2 | 0.2 | 0.4 |
| utilities | 37.0 | 38.4 | 1.4 | 3.8 |
| eeping clerks | 175.0 | 222.5 | 47.5 | 27.1 |

# TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolu Chang |
|---|---|---|---|
| Postal clerks | 315.0 | 320.0 | 5. |
| Proofreaders | 27.0 | 37.3 | 10. |
| Real estate appraisers | 24.0 | 33.6 | 9. |
| Receptionists | 423.0 | 570.0 | 147. |
| Shipping, receiving clerks | 438.0 | 500.0 | 62. |
| Statistical clerks | 291.0 | 350.0 | 59. |
| Stock clerks, store keepers | 496.0 | 625.7 | 129. |
| Teacher aides, except monitors | 150.0 | 286.4 | 136. |
| Telegraph messengers | 2.5 | 1.5 | -1. |
| Telegraph operators | 12.0 | 8.8 | -3. |
| Telephone operators | 388.0 | 404.4 | 16. |
| Ticket station, express agents | 94.0 | 115.1 | 21. |
| Weighters | 46.0 | 47.6 | 1. |
| Miscellaneous clerical workers, n.e.c. | 1,206.5 | 1,931.9 | 725. |
| **Craftsmen, Foremen, Kindred Workers** | 10,400.8 | 12,237.2 | 1,836. |
| Construction Craftsmen | 3,093.3 | 3,739.2 | 645. |
| Carpenters | 985.0 | 1,125.0 | 140. |
| Carpenter apprentices | 8.9 | 11.0 | 2. |
| Brickmasons and stonemasons | 172.0 | 205.0 | 33. |
| Brickmason and stonemason apprentices | 4.5 | 4.4 | -0. |
| Bulldozer operators | 100.0 | 121.0 | 21. |
| Cement and concrete finishers | 65.0 | 94.1 | 29. |
| Electricians | 450.0 | 581.4 | 131. |
| Electrician apprentice | 21.3 | 29.9 | 8. |
| Excavating, grading, machine operators | 280.0 | 846.2 | 66. |
| Floor layers, except tile setters | 23.5 | 29.9 | 6. |
| Painters, construction, and maintenance | 400.0 | 435.6 | 35. |
| Painter apprentices | 1.6 | 1.7 | 0. |
| Paperhangers | 10.0 | 13.7 | 3. |
| Plasterers | 28.0 | 30.0 | 2. |
| Plasterer apprentices | 0.5 | 0.4 | -0. |
| Plumbers and pipefitters | 355.0 | 460.0 | 105. |
| Plumber, pipefitter apprentices | 14.0 | 18.9 | 4. |
| Roofers and slaters | 63.0 | 95.0 | 32. |
| Structural metal craftsmen | 79.0 | 100.0 | 21. |
| Tilesetters | 32.0 | 36.0 | 4. |

# TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| | 315.0 | 320.0 | 5.0 | 1.6 |
| | 27.0 | 37.3 | 10.3 | 38.1 |
| praisers | 24.0 | 33.6 | 9.6 | 40.0 |
| | 423.0 | 570.0 | 147.0 | 34.8 |
| ving clerks | 438.0 | 500.0 | 62.0 | 14.2 |
| ks | 291.0 | 350.0 | 59.0 | 20.3 |
| tore keepers | 496.0 | 625.7 | 129.7 | 26.1 |
| except monitors | 150.0 | 286.4 | 136.4 | 90.9 |
| sengers | 2.5 | 1.5 | -1.0 | -40.0 |
| ators | 12.0 | 8.8 | -3.2 | -26.7 |
| ators | 388.0 | 404.4 | 16.4 | 4.2 |
| express agents | 94.0 | 115.1 | 21.1 | 22.4 |
| | 46.0 | 47.6 | 1.6 | 3.5 |
| clerical workers, n.e.c. | 1,206.5 | 1,931.9 | 725.4 | 60.1 |
| | | | | |
| **Kindred Workers** | **10,400.8** | **12,237.2** | **1,836.4** | **17.7** |
| smen | 3,093.3 | 3,739.2 | 645.9 | 20.9 |
| | 985.0 | 1,125.0 | 140.0 | 14.2 |
| entices | 8.9 | 11.0 | 2.1 | 23.6 |
| nd stonemasons | 172.0 | 205.0 | 33.0 | 19.2 |
| d stonemason apprentices | 4.5 | 4.4 | -0.1 | -2.2 |
| ators | 100.0 | 121.0 | 21.0 | 21.0 |
| ncrete finishers | 65.0 | 94.1 | 29.1 | 44.8 |
| | 450.0 | 581.4 | 131.4 | 29.2 |
| rentice | 21.3 | 29.9 | 8.6 | 40.4 |
| ding, machine operators | 280.0 | 846.2 | 66.2 | 23.6 |
| xcept tile setters | 23.5 | 29.9 | 6.4 | 27.2 |
| ruction, and maintenance | 400.0 | 435.6 | 35.6 | 8.9 |
| ices | 1.6 | 1.7 | 0.1 | 6.3 |
| | 10.0 | 13.7 | 3.7 | 37.0 |
| | 28.0 | 30.0 | 2.0 | 7.1 |
| ntices | 0.5 | 0.4 | -0.1 | -20.0 |
| ipefitters | 355.0 | 460.0 | 105.0 | 29.6 |
| tter apprentices | 14.0 | 18.9 | 4.9 | 35.0 |
| ters | 63.0 | 95.0 | 32.0 | 50.8 |
| l craftsmen | 79.0 | 100.0 | 21.0 | 26.6 |
| | 32.0 | 36.0 | 4.0 | 12.5 |

# TABLE 2
# NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
(IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Foremen, n.e.c. | 1,375.0 | 1,562.4 | 187.4 |
| Metalworking Craftsmen, except Mechanical | 1,092.8 | 1,212.0 | 119.2 |
| Blacksmiths | 10.0 | 9.6 | -0.4 |
| Boilermakers | 30.0 | 35.5 | 5.5 |
| Heat treaters, annealers, etc. | 23.0 | 21.7 | -1.3 |
| Forgemen and hammermen | 18.0 | 21.2 | 3.2 |
| Job and die setters, metal | 100.0 | 135.1 | 35.1 |
| Machinists | 361.0 | 400.0 | 39.0 |
| Machinist apprentices | 10.0 | 11.2 | 1.2 |
| Millwrights | 81.0 | 90.7 | 9.7 |
| Molders, metal | 55.0 | 56.5 | 1.5 |
| Molder apprentices | 0.8 | 0.9 | 0.1 |
| Pattern and model makers | 42.0 | 40.8 | -1.2 |
| Rollers and finishers, metal | 23.0 | 24.5 | 1.5 |
| Sheet metal workers, tinsmiths | 155.0 | 162.1 | 7.1 |
| Sheet metal worker apprentices | 6.0 | 8.2 | 2.2 |
| Tool and diemakers | 168.0 | 180.0 | 12.0 |
| Tool and diemaker apprentices | 10.0 | 14.0 | 4.0 |
| Mechanics, Repairmen, Installers | 2,648.4 | 3,267.6 | 619.2 |
| Air conditioning, heating, refrigeration | 130.0 | 215.0 | 85.0 |
| Aircrafts | 120.0 | 160.0 | 40.0 |
| Automobile accessories installers | 6.0 | 6.2 | 0.2 |
| Automobile body repairmen | 159.0 | 175.0 | 16.0 |
| Automobile mechanics | 837.0 | 975.0 | 138.0 |
| Automobile mechanic apprentices | 2.6 | 3.5 | 0.9 |
| Data processing machine repairmen | 36.0 | 72.6 | 36.6 |
| Farm implement | 46.3 | 50.0 | 3.7 |
| Heavy equipment mechanics, including diesel | 687.0 | 875.4 | 188.4 |
| Household appliance mechanics | 120.0 | 156.9 | 36.9 |
| Loom fixers | 18.0 | 17.2 | -0.8 |
| Office machine repairmen | 64.5 | 85.0 | 20.5 |
| Radio, television repairmen | 137.0 | 150.0 | 13.0 |
| Railroad, car shop repairmen | 54.0 | 48.2 | -5.8 |
| Mechanics, except automobile apprentice | 7.0 | 9.9 | 2.9 |
| Other mechanics and repairmen | 224.0 | 267.8 | 43.8 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| | 1,375.0 | 1,562.4 | 187.4 | 13.6 |
| men, except Mechanical | 1,092.8 | 1,212.0 | 119.2 | 10.9 |
| | 10.0 | 9.6 | -0.4 | -4.0 |
| | 30.0 | 35.5 | 5.5 | 18.3 |
| nealers, etc. | 23.0 | 21.7 | -1.3 | -5.7 |
| mmermen | 18.0 | 21.2 | 3.2 | 17.8 |
| rs, metal | 100.0 | 135.1 | 35.1 | 35.1 |
| | 361.0 | 400.0 | 39.0 | 10.8 |
| tices | 10.0 | 11.2 | 1.2 | 12.0 |
| | 81.0 | 90.7 | 9.7 | 12.0 |
| | 55.0 | 56.5 | 1.5 | 2.7 |
| es | 0.8 | 0.9 | 0.1 | 12.5 |
| l makers | 42.0 | 40.8 | -1.2 | -2.9 |
| hers, metal | 23.0 | 24.5 | 1.5 | 6.5 |
| ers, tinsmiths | 155.0 | 162.1 | 7.1 | 4.6 |
| er apprentices | 6.0 | 8.2 | 2.2 | 36.7 |
| ers | 168.0 | 180.0 | 12.0 | 7.1 |
| r apprentices | 10.0 | 14.0 | 4.0 | 40.0 |
| en, Installers | 2,648.4 | 3,267.6 | 619.2 | 23.4 |
| heating, refrigeration | 130.0 | 215.0 | 85.0 | 65.4 |
| | 120.0 | 160.0 | 40.0 | 33.3 |
| ssories installers | 6.0 | 6.2 | 0.2 | 3.3 |
| repairmen | 159.0 | 175.0 | 16.0 | 10.1 |
| anics | 837.0 | 975.0 | 138.0 | 16.5 |
| anic apprentices | 2.6 | 3.5 | 0.9 | 34.6 |
| machine repairmen | 36.0 | 72.6 | 36.6 | 101.7 |
| | 46.3 | 50.0 | 3.7 | 8.0 |
| mechanics, including diesel | 687.0 | 875.4 | 188.4 | 27.4 |
| nce mechanics | 120.0 | 156.9 | 36.9 | 30.8 |
| | 18.0 | 17.2 | -0.8 | -4.4 |
| pairmen | 64.5 | 85.0 | 20.5 | 31.8 |
| repairmen | 137.0 | 150.0 | 13.0 | 9.5 |
| p repairmen | 54.0 | 48.2 | -5.8 | -10.7 |
| t automobile apprentice | 7.0 | 9.9 | 2.9 | 41.4 |
| and repairmen | 224.0 | 267.8 | 43.8 | 19.6 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Printing Trade Craftsmen | 399.6 | 446.7 | 47.1 |
| Bookbinders | 32.0 | 35.7 | 3.7 |
| Compositors and typesetters | 170.0 | 175.4 | 5.4 |
| Electrotypers, stereotypers | 7.0 | 6.9 | -0.1 |
| Engravers, except photoengravers | 9.3 | 9.8 | 0.5 |
| Photoengravers, lithographers | 33.5 | 45.8 | 12.3 |
| Pressmen and plate printers | 139.0 | 165.0 | 26.0 |
| Pressmen and apprentices | 2.8 | 4.1 | 1.3 |
| Printing apprentices, except press | 6.0 | 4.0 | -2.0 |
| Transportation, Public Utilities Craftsmen | 504.8 | 567.9 | 63.1 |
| Electric power linemen, cablemen | 100.0 | 113.4 | 13.4 |
| Locomotive engineers | 37.5 | 34.9 | -2.6 |
| Locomotive firemen | 18.0 | 11.2 | -6.8 |
| Power station operators | 17.3 | 16.3 | -1.0 |
| Telephone installers, repairmen | 280.0 | 339.1 | 59.1 |
| Telephone linemen, splicers | 52.0 | 53.0 | 1.0 |
| Other Craftsmen, Kindred Workers | 1,287.1 | 1,441.5 | 154.4 |
| Bakers | 125.0 | 128.4 | 3.4 |
| Cabinet makers | 75.0 | 83.1 | 8.1 |
| Carpet installers | 47.0 | 60.9 | 13.9 |
| Cranemen, derrickmen, hoistmen | 170.0 | 193.5 | 23.5 |
| Decorators, window dressers | 70.0 | 96.4 | 26.4 |
| Dental laboratory technicians | 30.0 | 38.5 | 8.5 |
| Furniture and wood finishers | 23.0 | 23.7 | 0.7 |
| Furriers | 2.6 | 1.9 | -0.7 |
| Glaziers | 25.0 | 33.1 | 8.1 |
| Inspectors, log and lumber | 17.0 | 19.1 | 2.1 |
| Inspectors, other | 128.0 | 147.6 | 19.6 |
| Jewelers and watchmakers | 41.5 | 44.0 | 2.5 |
| Millers, grain, flour, feed | 8.8 | 10.0 | 1.2 |
| Motion picture projectionists | 16.0 | 17.4 | 1.4 |
| Opticians, lens grinder, polisher | 27.0 | 37.0 | 10.0 |
| Piano and organ tuners and repairmen | 7.0 | 7.0 | 0 |
| Shipfitters | 11.0 | 13.7 | 2.7 |
| Shoe repairmen | 31.0 | 23.0 | -8.0 |
| Sign painters and letterers | 20.0 | 23.0 | 3.0 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| ftsmen | 399.6 | 446.7 | 47.1 | 11.8 |
| | 32.0 | 35.7 | 3.7 | 11.6 |
| d typesetters | 170.0 | 175.4 | 5.4 | 3.2 |
| tereotypers | 7.0 | 6.9 | -0.1 | -1.4 |
| pt photoengravers | 9.3 | 9.8 | 0.5 | 5.4 |
| , lithographers | 33.5 | 45.8 | 12.3 | 36.7 |
| late printers | 139.0 | 165.0 | 26.0 | 18.7 |
| pprentices | 2.8 | 4.1 | 1.3 | 46.4 |
| ices, except press | 6.0 | 4.0 | -2.0 | -33.3 |
| blic Utilities Craftsmen | 504.8 | 567.9 | 63.1 | 12.5 |
| inemen, cablemen | 100.0 | 113.4 | 13.4 | 13.4 |
| ineers | 37.5 | 34.9 | -2.6 | -6.9 |
| men | 18.0 | 11.2 | -6.8 | -37.8 |
| perators | 17.3 | 16.3 | -1.0 | -5.8 |
| llers, repairmen | 280.0 | 339.1 | 59.1 | 21.1 |
| en, splicers | 52.0 | 53.0 | 1.0 | 1.9 |
| indred Workers | 1,287.1 | 1,441.5 | 154.4 | 12.0 |
| | 125.0 | 128.4 | 3.4 | 2.7 |
| | 75.0 | 83.1 | 8.1 | 10.8 |
| | 47.0 | 60.9 | 13.9 | 29.6 |
| kmen, hoistmen | 170.0 | 193.5 | 23.5 | 13.8 |
| ow dressers | 70.0 | 96.4 | 26.4 | 37.7 |
| technicians | 30.0 | 38.5 | 8.5 | 28.3 |
| od finishers | 23.0 | 23.7 | 0.7 | 3.0 |
| | 2.6 | 1.9 | -0.7 | -26.9 |
| | 25.0 | 33.1 | 8.1 | 32.4 |
| nd lumber | 17.0 | 19.1 | 2.1 | 12.4 |
| | 128.0 | 147.6 | 19.6 | 15.3 |
| chmakers | 41.5 | 44.0 | 2.5 | 6.0 |
| our, feed | 8.8 | 10.0 | 1.2 | 13.6 |
| ojectionists | 16.0 | 17.4 | 1.4 | 8.8 |
| rinder, polisher | 27.0 | 37.0 | 10.0 | 37.0 |
| uners and repairmen | 7.0 | 7.0 | 0 | 0 |
| | 11.0 | 13.7 | 2.7 | 24.5 |
| | 31.0 | 23.0 | -8.0 | -25.8 |
| letterers | 20.0 | 23.0 | 3.0 | 15.0 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Stationary engineers | 178.0 | 180.0 | 2.0 |
| Stone cutters, stone carvers | 7.0 | 8.2 | 1.1 |
| Tailor | 68.0 | 69.9 | 1.9 |
| Upholsterers | 68.0 | 81.2 | 13.2 |
| Craftsmen, kindred workers, n.e.c. | 80.0 | 88.9 | 8.9 |
| Former armed forces members | 5.0 | - | - |
| Craft apprentices, n.e.c. | 10.7 | 12.0 | 1.3 |
| **Operatives** | 13,396.7 | 15,039.2 | 1,642.5 |
| Operatives, except Transportation | 10,384.9 | 11,556.7 | 1,171.8 |
| Semiskilled metalworking | 1,330.8 | 1,618.0 | 287.2 |
| Drill press operatives | 76.0 | 87.8 | 11.8 |
| Furnacemen, smeltermen, pourers | 74.4 | 84.9 | 10.5 |
| Grinding machine operatives | 145.0 | 180.9 | 35.9 |
| Heaters, metal | 7.5 | 6.8 | -0.7 |
| Lathe, milling machine operatives | 155.0 | 181.8 | 26.8 |
| Metal platers | 36.0 | 43.5 | 7.5 |
| Other precision machine operatives | 76.5 | 100.2 | 23.7 |
| Punch stamping press operatives | 180.0 | 214.0 | 34.0 |
| Solderers | 42.4 | 29.4 | -13.0 |
| Welders and flame cutters | 538.0 | 688.7 | 150.7 |
| Semiskilled textile operatives | 438.4 | 404.9 | -33.5 |
| Carding, lapping, combing operatives | 17.8 | 11.8 | -6.0 |
| Knitters, loopers and toppers | 34.6 | 29.6 | -5.0 |
| Spinners, twisters, winders | 150.0 | 147.3 | -2.7 |
| Weavers | 46.0 | 38.3 | -7.7 |
| Other textile operatives | 190.0 | 177.9 | -12.1 |
| Semiskilled packing and inspecting | 1,456.2 | 1,702.5 | 246.3 |
| Checkers, examiners, etc., manufacturing | 690.0 | 811.1 | 121.1 |
| Graders and sorters, manufacturing | 45.3 | 50.9 | 5.6 |
| Meat wrappers, retail trade | 46.5 | 60.3 | 13.8 |
| Packers, wrappers, except meat, produce | 649.0 | 751.9 | 102.9 |
| Produce graders, packers, except factory, farm | 25.4 | 28.3 | 2.9 |
| Other Operatives, except Transportation | 7,159.6 | 7,831.3 | 671.7 |
| Asbestos, insulation workers | 27.0 | 33.2 | 6.2 |

# TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| s | 178.0 | 180.0 | 2.0 | 1.1 |
| carvers | 7.0 | 8.2 | 1.1 | 15.7 |
| | 68.0 | 69.9 | 1.9 | 2.8 |
| | 68.0 | 81.2 | 13.2 | 19.4 |
| workers, n.e.c. | 80.0 | 88.9 | 8.9 | 11.1 |
| s members | 5.0 | - | - | - |
| .e.c. | 10.7 | 12.0 | 1.3 | 12.1 |
| | 13,396.7 | 15,039.2 | 1,642.5 | 12.3 |
| nsportation | 10,384.9 | 11,556.7 | 1,171.8 | 11.3 |
| orking | 1,330.8 | 1,618.0 | 287.2 | 21.6 |
| tives | 76.0 | 87.8 | 11.8 | 15.5 |
| eltermen, pourers | 74.4 | 84.9 | 10.5 | 14.1 |
| operatives | 145.0 | 180.9 | 35.9 | 24.8 |
| | 7.5 | 6.8 | -0.7 | -9.3 |
| achine operatives | 155.0 | 181.8 | 26.8 | 17.3 |
| | 36.0 | 43.5 | 7.5 | 20.8 |
| machine operatives | 76.5 | 100.2 | 23.7 | 31.0 |
| press operatives | 180.0 | 214.0 | 34.0 | 18.9 |
| | 42.4 | 29.4 | -13.0 | -30.7 |
| e cutters | 538.0 | 688.7 | 150.7 | 28.0 |
| operatives | 438.4 | 404.9 | -33.5 | -7.6 |
| , combing operatives | 17.8 | 11.8 | -6.0 | -33.7 |
| and toppers | 34.6 | 29.6 | -5.0 | -14.5 |
| s, winders | 150.0 | 147.3 | -2.7 | -1.8 |
| | 46.0 | 38.3 | -7.7 | -16.7 |
| ratives | 190.0 | 177.9 | -12.1 | -6.4 |
| and inspecting | 1,456.2 | 1,702.5 | 246.3 | 16.9 |
| ers, etc., manufacturing | 690.0 | 811.1 | 121.1 | 17.6 |
| rs, manufacturing | 45.3 | 50.9 | 5.6 | 12.4 |
| tail trade | 46.5 | 60.3 | 13.8 | 29.7 |
| s, except meat, produce | 649.0 | 751.9 | 102.9 | 15.9 |
| packers, except factory, farm | 25.4 | 28.3 | 2.9 | 11.4 |
| t Transportation | 7,159.6 | 7,831.3 | 671.7 | 9.4 |
| workers | 27.0 | 33.2 | 6.2 | 23.0 |

# TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Assemblers | 944.0 | 1,068.0 | 124.0 |
| Blasters and powdermen | 7.1 | 7.2 | 0.1 |
| Bottling, canning operatives | 60.0 | 64.8 | 4.8 |
| Chainmen, rodmen, axmen, surveying | 11.0 | 12.5 | 1.5 |
| Clothing ironers and pressers | 200.0 | 173.0 | -27.0 |
| Cutting operatives, n.e.c. | 239.0 | 288.1 | 49.1 |
| Dressmaker, seamstress, except factory | 110.0 | 106.6 | -3.4 |
| Drillers, earth | 57.5 | 56.5 | -1.0 |
| Dry wall installers, lathes | 47.0 | 68.7 | 21.7 |
| Dryers | 28.0 | 34.0 | 6.0 |
| Filer, polisher, sander, buffer | 126.0 | 125.1 | -0.9 |
| Garage workers, gas station attendants | 499.0 | 575.0 | 76.0 |
| Laundry, dry cleaning operatives, n.e.c. | 190.0 | 214.6 | 24.6 |
| Meat cutters, butchers, except manufacturing | 202.0 | 200.0 | -2.0 |
| Meat cutters, butchers | 88.0 | 91.9 | 3.9 |
| Milleners | 2.0 | 1.3 | -0.7 |
| Mine operatives, n.e.c. | 165.0 | 133.2 | -31.8 |
| Mixing operatives | 80.7 | 89.6 | 8.9 |
| Oilers, greasers, except automobile | 51.0 | 49.0 | -2.0 |
| Painters, manufacturing articles | 178.0 | 190.0 | 12.0 |
| Photographic process workers | 69.0 | 97.8 | 28.8 |
| Riveters and fasteners | 29.0 | 32.4 | 3.4 |
| Sailors and deckhands | 35.0 | 29.0 | -6.0 |
| Sawyers | 120.0 | 143.8 | 23.8 |
| Sewers and stitchers | 926.0 | 1,044.8 | 118.8 |
| Shoemaking machine operatives | 67.0 | 45.5 | -21.5 |
| Stationary firemen | 94.0 | 90.0 | -4.0 |
| Winding operatives, n.e.c. | 69.0 | 89.4 | 20.4 |
| Miscellaneous machine operatives | 1,307.0 | 1,500.0 | 193.0 |
| Operatives, n.e.c. | 1,131.4 | 1,176.4 | 45.0 |
| Transportation Equipment Operatives | 3,011.9 | 3,482.6 | 470.7 |
| Boatmen and canalmen | 6.0 | 5.7 | -0.3 |
| Bus drivers | 229.0 | 297.2 | 68.2 |
| Conductors, motormen, urban rail | 8.4 | 9.5 | 1.1 |
| Deliverymen and routemen | 817.0 | 965.0 | 148.0 |
| Fork lift, tow motor operatives | 281.0 | 340.0 | 59.0 |
| Motormen, mine, factory, logging | 10.0 | 9.5 | -0.5 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| | 944.0 | 1,068.0 | 124.0 | 13.1 |
| wdermen | 7.1 | 7.2 | 0.1 | 1.4 |
| g operatives | 60.0 | 64.8 | 4.8 | 8.0 |
| en, axmen, surveying | 11.0 | 12.5 | 1.5 | 13.6 |
| and pressers | 200.0 | 173.0 | -27.0 | -13.5 |
| es, n.e.c. | 239.0 | 288.1 | 49.1 | 20.5 |
| mstress, except factory | 110.0 | 106.6 | -3.4 | -3.1 |
| | 57.5 | 56.5 | -1.0 | -1.7 |
| ers, lathes | 47.0 | 68.7 | 21.7 | 46.2 |
| | 28.0 | 34.0 | 6.0 | 21.4 |
| sander, buffer | 126.0 | 125.1 | -0.9 | -0.7 |
| gas station attendants | 499.0 | 575.0 | 76.0 | 15.2 |
| aning operatives, n.e.c. | 190.0 | 214.6 | 24.6 | 12.9 |
| chers, except manufacturing | 202.0 | 200.0 | -2.0 | -1.0 |
| chers | 88.0 | 91.9 | 3.9 | 4.4 |
| | 2.0 | 1.3 | -0.7 | -35.0 |
| n.e.c. | 165.0 | 133.2 | -31.8 | -19.3 |
| s | 80.7 | 89.6 | 8.9 | 11.0 |
| except automobile | 51.0 | 49.0 | -2.0 | -3.9 |
| cturing articles | 178.0 | 190.0 | 12.0 | 6.7 |
| cess workers | 69.0 | 97.8 | 28.8 | 41.7 |
| teners | 29.0 | 32.4 | 3.4 | 11.7 |
| hands | 35.0 | 29.0 | -6.0 | -17.1 |
| | 120.0 | 143.8 | 23.8 | 19.8 |
| hers | 926.0 | 1,044.8 | 118.8 | 12.8 |
| ine operatives | 67.0 | 45.5 | -21.5 | -32.1 |
| n | 94.0 | 90.0 | -4.0 | -4.3 |
| es, n.e.c. | 69.0 | 89.4 | 20.4 | 29.6 |
| chine operatives | 1,307.0 | 1,500.0 | 193.0 | 14.8 |
| . | 1,131.4 | 1,176.4 | 45.0 | 4.0 |
| | | | | |
| pment Operatives | 3,011.9 | 3,482.6 | 470.7 | 15.6 |
| almen | 6.0 | 5.7 | -0.3 | -5.0 |
| | 229.0 | 297.2 | 68.2 | 29.8 |
| rmen, urban rail | 8.4 | 9.5 | 1.1 | 13.1 |
| routemen | 817.0 | 965.0 | 148.0 | 18.1 |
| or operatives | 281.0 | 340.0 | 59.0 | 21.0 |
| actory, logging | 10.0 | 9.5 | -0.5 | -5.0 |

### TABLE 2
### NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
### (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Parking attendants | 30.5 | 37.5 | 7.0 |
| Railroad brakemen | 49.0 | 42.4 | -6.6 |
| Railroad switchmen | 53.0 | 48.2 | -4.8 |
| Taxicab drivers, chauffeurs | 150.0 | 146.4 | -3.6 |
| Truck drivers | 1,378.0 | 1,581.2 | 203.2 |
| | | | |
| Service Workers | 10,357.3 | 12,700.3 | 2,343.0 |
| Cleaning Service Workers | 1,992.5 | 2,620.7 | 628.2 |
| Chambermaid, maid, except private | 218.5 | 285.7 | 67.2 |
| Cleaners and charwomen | 611.0 | 735.0 | 124.0 |
| Janitors and sextons | 1,163.0 | 1,600.0 | 437.0 |
| | | | |
| Food Service Workers | 3,094.1 | 3,575.9 | 481.8 |
| Bartenders | 189.0 | 221.5 | 32.5 |
| Busboys | 110.0 | 115.7 | 5.7 |
| Cooks, except private | 821.0 | 950.0 | 129.0 |
| Dishwashers | 207.0 | 252.8 | 45.8 |
| Food counter, fountain workers | 282.0 | 264.1 | -17.9 |
| Waiters | 1,096.0 | 1,288.4 | 192.4 |
| Food workers, n.e.c., except private | 389.0 | 483.4 | 94.4 |
| | | | |
| Health Service Workers | 1,456.9 | 2,245.3 | 788.4 |
| Dental assistants | 100.0 | 145.0 | 45.0 |
| Health aides, except nursing | 133.0 | 249.4 | 116.4 |
| Health trainees | 19.0 | 5.5 | -13.5 |
| Lay midwives | 0.8 | 1.1 | 0.3 |
| Nurses aides, orderlies | 834.0 | 1,203.4 | 369.4 |
| Practical nurses | 370.0 | 640.9 | 270.9 |
| | | | |
| Personal Service Workers | 1,398.8 | 1,756.2 | 357.4 |
| Airline stewardesses | 34.2 | 59.7 | 25.5 |
| Attendant, recreation, amusement | 80.0 | 102.8 | 22.8 |
| Attendant, personal service, n.e.c. | 62.0 | 65.8 | 3.8 |
| Baggage porters and bellhops | 21.0 | 14.3 | -6.7 |
| Barbers | 158.0 | 150.0 | -8.0 |
| Boarding, lodging housekeepers | 9.6 | 2.9 | -6.7 |
| Bootblacks | 3.2 | 1.5 | -1.7 |
| Child care workers, except private | 339.0 | 482.9 | 143.9 |

# TABLE 2
# NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| lants | 30.5 | 37.5 | 7.0 | 23.0 |
| emen | 49.0 | 42.4 | -6.6 | -13.5 |
| chmen | 53.0 | 48.2 | -4.8 | -9.1 |
| rs, chauffeurs | 150.0 | 146.4 | -3.6 | -2.4 |
| | 1,378.0 | 1,581.2 | 203.2 | 14.7 |
| | | | | |
| | 10,357.3 | 12,700.3 | 2,343.0 | 22.6 |
| Workers | 1,992.5 | 2,620.7 | 628.2 | 31.5 |
| maid, except private | 218.5 | 285.7 | 67.2 | 30.8 |
| charwomen | 611.0 | 735.0 | 124.0 | 20.3 |
| extons | 1,163.0 | 1,600.0 | 437.0 | 37.6 |
| | | | | |
| kers | 3,094.1 | 3,575.9 | 481.8 | 15.6 |
| | 189.0 | 221.5 | 32.5 | 17.2 |
| | 110.0 | 115.7 | 5.7 | 5.2 |
| private | 821.0 | 950.0 | 129.0 | 15.7 |
| | 207.0 | 252.8 | 45.8 | 22.1 |
| fountain workers | 282.0 | 264.1 | -17.9 | -6.3 |
| | 1,096.0 | 1,288.4 | 192.4 | 17.6 |
| n.e.c., except private | 389.0 | 483.4 | 94.4 | 24.3 |
| | | | | |
| rkers | 1,456.9 | 2,245.3 | 788.4 | 54.1 |
| nts | 100.0 | 145.0 | 45.0 | 45.0 |
| xcept nursing | 133.0 | 249.4 | 116.4 | 87.5 |
| | 19.0 | 5.5 | -13.5 | -71.1 |
| | 0.8 | 1.1 | 0.3 | 37.5 |
| orderlies | 834.0 | 1,203.4 | 369.4 | 44.3 |
| s | 370.0 | 640.9 | 270.9 | 73.2 |
| | | | | |
| orkers | 1,398.8 | 1,756.2 | 357.4 | 25.6 |
| esses | 34.2 | 59.7 | 25.5 | 74.6 |
| eation, amusement | 80.0 | 102.8 | 22.8 | 28.5 |
| onal service, n.e.c. | 62.0 | 65.8 | 3.8 | 6.1 |
| and bellhops | 21.0 | 14.3 | -6.7 | -31.9 |
| | 158.0 | 150.0 | -8.0 | -5.1 |
| ng housekeepers | 9.6 | 2.9 | -6.7 | -0.7 |
| | 3.2 | 1.5 | -1.7 | -53.1 |
| ers, except private | 339.0 | 482.9 | 143.9 | 42.4 |

## TABLE 2
## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| Elevator operators | 39.0 | 20.2 | -18.8 |
| Hairdressers, cosmetologists | 480.0 | 600.0 | 120.0 |
| Housekeepers, except private | 111.0 | 160.8 | 49.8 |
| Personal service apprentice | 1.0 | 0.5 | -0.5 |
| School monitors | 26.5 | 40.0 | 13.5 |
| Ushers, recreation, amusement | 16.3 | 18.0 | 1.7 |
| Welfare service aides | 18.0 | 36.8 | 18.8 |
| Protective Service Workers | 1,046.9 | 1,362.4 | 315.5 |
| Crossing guards, bridgetenders | 46.0 | 52.0 | 6.0 |
| Firemen, fire protection | 181.0 | 258.4 | 77.4 |
| Guards and watchmen | 386.0 | 470.0 | 84.0 |
| Marshalls and constables | 5.9 | 8.0 | 2.1 |
| Policemen and detectives | 388.0 | 520.0 | 132.0 |
| Sheriffs and bailiffs | 40.0 | 54.0 | 14.0 |
| Private Household Workers | 1,368.0 | 1,139.7 | -228.3 |
| Child care workers | 517.0 | 432.0 | -85.0 |
| Cooks, private | 36.0 | 32.0 | -4.0 |
| Housekeepers, private | 107.0 | 92.0 | -15.0 |
| Laundresses, private | 12.0 | 8.0 | -4.0 |
| Maids, servants, private | 696.0 | 575.7 | -120.3 |
| **Laborers, except Farm** | 4,175.0 | 4,499.9 | 324.9 |
| Animal Caretakers, except Farm | 71.0 | 71.7 | 0.7 |
| Carpenters, Helpers | 117.0 | 80.6 | -36.4 |
| Construction Laborers, except Carpenter Helpers | 805.0 | 855.6 | 50.6 |
| Fishermen and Oystermen | 34.0 | 27.8 | -6.2 |
| Freight, Material Handlers | 748.0 | 846.7 | 98.7 |
| Garbage Collectors | 84.0 | 139.1 | 55.1 |
| Gardeners, Groundkeepers, except Farm | 537.0 | 550.4 | 13.4 |
| Longshoremen and Stevedores | 56.0 | 55.5 | -0.5 |
| Lumbermen, Raftsmen, Woodchoppers | 82.0 | 68.9 | -13.1 |
| Stock Handlers | 718.0 | 870.3 | 152.3 |
| Teamsters | 7.0 | 3.9 | -3.1 |
| Vehicle Washer, Equipment Cleaners | 176.0 | 200.1 | 24.1 |
| Warehousemen, n.e.c. | 149.0 | 149.6 | 0.6 |
| Other Laborers | 591.0 | 579.8 | -11.2 |

# TABLE 2
# NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
## (IN THOUSANDS)

|  | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| ors | 39.0 | 20.2 | -18.8 | -48.2 |
| osmetologists | 480.0 | 600.0 | 120.0 | 25.0 |
| except private | 111.0 | 160.8 | 49.8 | 44.9 |
| e apprentice | 1.0 | 0.5 | -0.5 | -50.0 |
|  | 26.5 | 40.0 | 13.5 | 50.9 |
| ion, amusement | 16.3 | 18.0 | 1.7 | 10.4 |
| aides | 18.0 | 36.8 | 18.8 | 104.4 |
| Workers | 1,046.9 | 1,362.4 | 315.5 | 30.1 |
| , bridgetenders | 46.0 | 52.0 | 6.0 | 13.0 |
| otection | 181.0 | 258.4 | 77.4 | 42.8 |
| chmen | 386.0 | 470.0 | 84.0 | 21.8 |
| onstables | 5.9 | 8.0 | 2.1 | 35.6 |
| detectives | 388.0 | 520.0 | 132.0 | 34.0 |
| liffs | 40.0 | 54.0 | 14.0 | 35.0 |
| Workers | 1,368.0 | 1,139.7 | -228.3 | -16.7 |
| ers | 517.0 | 432.0 | -85.0 | -16.4 |
|  | 36.0 | 32.0 | -4.0 | -11.1 |
| private | 107.0 | 92.0 | -15.0 | -14.0 |
| ivate | 12.0 | 8.0 | -4.0 | -33.3 |
| , private | 696.0 | 575.7 | -120.3 | -17.3 |
|  | 4,175.0 | 4,499.9 | 324.9 | 7.8 |
| except Farm | 71.0 | 71.7 | 0.7 | 1.0 |
|  | 117.0 | 80.6 | -36.4 | -31.1 |
| ers, except Carpenter Helpers | 805.0 | 855.6 | 50.6 | 6.3 |
| ermen | 34.0 | 27.8 | -6.2 | -18.2 |
| ndlers | 748.0 | 846.7 | 98.7 | 13.2 |
|  | 84.0 | 139.1 | 55.1 | 65.6 |
| eepers, except Farm | 537.0 | 550.4 | 13.4 | 2.5 |
| Stevedores | 56.0 | 55.5 | -0.5 | -0.9 |
| en, Woodchoppers | 82.0 | 68.9 | -13.1 | -16.0 |
|  | 718.0 | 870.3 | 152.3 | 21.2 |
|  | 7.0 | 3.9 | -3.1 | -44.3 |
| uipment Cleaners | 176.0 | 200.1 | 24.1 | 13.7 |
| c. | 149.0 | 149.6 | 0.6 | 0.4 |
|  | 591.0 | 579.8 | -11.2 | -1.9 |

## TABLE 2

## NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued

## (IN THOUSANDS)

| Occupation | 1970 | 1980 | Absolute Change |
|---|---|---|---|
| **Farmers and Farm Workers** | 3,129.0 | 2,000.0 | -1,129.0 |
| Farmers and Farm Managers | 1,723.0 | 1,118.3 | -604.7 |
| Farmers (owners and tenants) | 1,690.0 | 1,073.4 | -616.6 |
| Farm managers | 33.0 | 44.9 | 11.9 |
| Farm Laborers, Farm Foremen | 1,406.0 | 881.7 | -524.3 |
| Farm foremen | 31.0 | 26.5 | -4.5 |
| Farm laborers, wage workers | 897.0 | 535.7 | -361.3 |
| Farm laborers, unpaid family | 474.0 | 315.6 | -158.4 |
| Farm laborers, self-employed | 4.0 | 3.9 | -0.1 |

SOURCE: Bureau of Labor Statistics

### TABLE 2
### NATIONAL 1970 EMPLOYMENT AND PROJECTED 1980 REQUIREMENTS BY OCCUPATION - continued
### (IN THOUSANDS)

|  | 1970 | 1980 | Absolute Change | Percent Change |
|---|---|---|---|---|
| s | 3,129.0 | 2,000.0 | -1,129.0 | -36.1 |
| agers | 1,723.0 | 1,118.3 | -604.7 | -35.1 |
| d tenants) | 1,690.0 | 1,073.4 | -616.6 | -36.5 |
|  | 33.0 | 44.9 | 11.9 | 36.1 |
| Foremen | 1,406.0 | 881.7 | -524.3 | -37.3 |
|  | 31.0 | 26.5 | -4.5 | -14.5 |
| e workers | 897.0 | 535.7 | -361.3 | -40.3 |
| id family | 474.0 | 315.6 | -158.4 | -33.4 |
| employed | 4.0 | 3.9 | -0.1 | -2.5 |

or Statistics

# TABLE 3
# NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATIONS

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average 1970-8<br>Total | <br>Employm Chang |
|---|---|---|---|---|---|
| **Professional, Technical, Kindred** | | | | | |
| Engineers, Technical | | | | | |
| Engineers, aero-astronautic | 61.0 | 70.0 | 14.8 | 1,630 | 900 |
| Engineers, chemical | 50.0 | 57.0 | 14.0 | 1,360 | 700 |
| Engineers, civil | 167.0 | 205.0 | 22.8 | 7,630 | 3,800 |
| Engineers, electrical | 281.0 | 365.0 | 29.9 | 12,400 | 8,400 |
| Engineers, industrial | 159.0 | 223.0 | 40.3 | 9,360 | 6,400 |
| Engineers, mechanical | 185.0 | 225.0 | 21.6 | 7,220 | 4,000 |
| Engineers, metallurgical | 15.0 | 19.4 | 29.3 | 690 | 440 |
| Engineers, mining | 5.0 | 4.7 | -6.0 | 90 | -30 |
| Engineers, petroleum | 12.0 | 13.4 | 11.7 | 860 | 140 |
| Engineers, sales | 39.0 | 46.0 | 17.9 | 1,450 | 700 |
| Engineers, other | 130.0 | 187.0 | 43.8 | 8,390 | 5,700 |
| Life and Physical Scientists | | | | | |
| Agricultural scientists | 13.0 | 15.0 | 15.4 | 540 | 200 |
| Atmospheric, space scientists | 6.0 | 8.0 | 33.3 | 1,540 | 200 |
| Biological scientists | 29.0 | 39.0 | 34.5 | 2,010 | 1,000 |
| Chemists | 109.0 | 150.0 | 37.6 | 6,610 | 4,100 |
| Geologists | 24.0 | 30.0 | 25.0 | 1,050 | 600 |
| Marine scientists | 3.0 | 5.0 | 66.7 | 270 | 200 |
| Physicists and astronomers | 21.0 | 26.5 | 26.2 | 3,290 | 550 |
| Life, physical scientists, n.e.c. | 2.0 | 2.2 | 10.0 | 60 | 20 |
| Mathematical Specialists | | | | | |
| Actuaries | 5.0 | 7.2 | 44.0 | 390 | 220 |
| Mathematicians | 8.0 | 11.5 | 43.8 | 560 | 350 |
| Statisticians | 21.0 | 30.0 | 42.9 | 1,860 | 900 |
| Engineers, Science Technicians | | | | | |
| Agriculture, biological technicians, except health | 36.0 | 52.0 | 44.4 | 2,980 | 1,600 |
| Chemical technicians | 77.9 | 94.9 | 21.8 | 3,340 | 1,700 |
| Draftsmen | 316.0 | 425.0 | 34.5 | 16,380 | 10,900 |
| Electrical, electronic technicians | 154.0 | 237.0 | 53.9 | 10,430 | 8,300 |
| Industrial engineering technicians | 20.0 | 23.0 | 15.0 | 680 | 300 |
| Mathematical technicians | 1.0 | 1.0 | 0 | 10 | 0 |
| Mechanical engineering technicians | 12.0 | 14.5 | 20.8 | 450 | 250 |
| Surveyors | 59.0 | 76.0 | 28.8 | 2,660 | 1,700 |
| Engineering, science technicians, n.e.c. | 190.0 | 355.0 | 86.8 | 22,330 | 16,500 |

# TABLE 3

## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATIONS

|  |  |  |  | Annual Average Openings 1970-80 |  |  |
|---|---|---|---|---|---|---|
|  | 1970 Employment | 1980 Employment | Percent Change | Total | Employment Change | Replacement Needs |
| ical, Kindred |  |  |  |  |  |  |
| ical |  |  |  |  |  |  |
| ro-astronautic | 61.0 | 70.0 | 14.8 | 1,630 | 900 | 730 |
| emical | 50.0 | 57.0 | 14.0 | 1,360 | 700 | 660 |
| il | 167.0 | 205.0 | 22.8 | 7,630 | 3,800 | 3,830 |
| ctrical | 281.0 | 365.0 | 29.9 | 12,400 | 8,400 | 4,000 |
| lustrial | 159.0 | 223.0 | 40.3 | 9,360 | 6,400 | 2,960 |
| chanical | 185.0 | 225.0 | 21.6 | 7,220 | 4,000 | 3,220 |
| tallurgical | 15.0 | 19.4 | 29.3 | 690 | 440 | 230 |
| ing | 5.0 | 4.7 | -6.0 | 90 | -30 | 120 |
| roleum | 12.0 | 13.4 | 11.7 | 860 | 140 | 720 |
| es | 39.0 | 46.0 | 17.9 | 1,450 | 700 | 750 |
| er | 130.0 | 187.0 | 43.8 | 8,390 | 5,700 | 2,690 |
| Scientists |  |  |  |  |  |  |
| ientists | 13.0 | 15.0 | 15.4 | 540 | 200 | 340 |
| pace scientists | 6.0 | 8.0 | 33.3 | 1,540 | 200 | 1,340 |
| ntists | 29.0 | 39.0 | 34.5 | 2,010 | 1,000 | 1,010 |
|  | 109.0 | 150.0 | 37.6 | 6,610 | 4,100 | 2,510 |
|  | 24.0 | 30.0 | 25.0 | 1,050 | 600 | 450 |
| ts | 3.0 | 5.0 | 66.7 | 270 | 200 | 70 |
| astronomers | 21.0 | 26.5 | 26.2 | 3,290 | 550 | 2,740 |
| scientists, n.e.c. | 2.0 | 2.2 | 10.0 | 60 | 20 | 40 |
| ialists |  |  |  |  |  |  |
|  | 5.0 | 7.2 | 44.0 | 390 | 220 | 170 |
|  | 8.0 | 11.5 | 43.8 | 560 | 350 | 210 |
|  | 21.0 | 30.0 | 42.9 | 1,860 | 900 | 960 |
| Technicians |  |  |  |  |  |  |
| logical technicians, except health | 36.0 | 52.0 | 44.4 | 2,980 | 1,600 | 1,380 |
| icians | 77.9 | 94.9 | 21.8 | 3,340 | 1,700 | 1,640 |
|  | 316.0 | 425.0 | 34.5 | 16,380 | 10,900 | 5,480 |
| tronic technicians | 154.0 | 237.0 | 53.9 | 10,430 | 8,300 | 2,130 |
| eering technicians | 20.0 | 23.0 | 15.0 | 680 | 300 | 380 |
| chnicians | 1.0 | 1.0 | 0 | 10 | 0 | 0 |
| neering technicians | 12.0 | 14.5 | 20.8 | 450 | 250 | 200 |
|  | 59.0 | 76.0 | 28.8 | 2,660 | 1,700 | 960 |
| ience technicians, n.e.c. | 190.0 | 355.0 | 86.8 | 22,330 | 16,500 | 5,830 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average 1970-80 Total | Employme Change |
|---|---|---|---|---|---|
| **Medical Workers, except Technicians** | | | | | |
| Chiropractors | 16.0 | 18.2 | 13.8 | 960 | 220 |
| Dentists | 94.1 | 130.0 | 38.2 | 7,890 | 3,590 |
| Dietitians | 30.0 | 42.0 | 40.0 | 3,310 | 1,200 |
| Optometrists | 18.0 | 22.0 | 22.2 | 1,070 | 400 |
| Pharmacists | 129.0 | 156.9 | 21.6 | 8,380 | 2,790 |
| Physicians, MD osteopaths | 290.0 | 405.0 | 39.7 | 23,250 | 11,500 |
| Podiatrists | 7.0 | 8.3 | 18.6 | 430 | 130 |
| Registered nurses | 680.0 | 980.0 | 44.1 | 79,550 | 30,000 |
| Therapists | 81.6 | 147.0 | 80.1 | 12,130 | 6,540 |
| Veterinarians | 22.6 | 33.0 | 46.0 | 1,590 | 1,040 |
| Other medical and health | 1.0 | 1.7 | 70.0 | 350 | 70 |
| **Health Technologists and Technicians** | | | | | |
| Clinical lab technologists and technicians | 130.0 | 240.0 | 84.6 | 20,820 | 11,000 |
| Dental hygienists | 16.0 | 34.0 | 112.5 | 3,600 | 1,800 |
| Health record technologists and technicians | 12.3 | 30.0 | 143.9 | 3,070 | 1,770 |
| Radiologic technologists and technicians | 52.0 | 81.0 | 55.8 | 6,750 | 2,900 |
| Other health technologists and technicians | 60.0 | 110.0 | 83.8 | 8,760 | 5,000 |
| **Technicians, except Health** | | | | | |
| Airplane pilots | 49.0 | 67.0 | 36.7 | 2,320 | 1,800 |
| Air traffic controllers | 25.0 | 30.0 | 20.0 | 820 | 500 |
| Embalmers | 5.0 | 4.1 | -18.0 | 10 | -90 |
| Flight engineers | 6.0 | 9.0 | 50.0 | 380 | 300 |
| Radio operators | 30.0 | 40.0 | 33.3 | 2,140 | 1,000 |
| Tool programers, numerical | 3.0 | 4.0 | 33.3 | 160 | 100 |
| Other technicians, except health | 37.0 | 77.0 | 108.1 | 5,290 | 4,000 |
| Therapy assistants | 3.5 | 6.8 | 94.3 | 590 | 330 |
| **Computer Specialists** | | | | | |
| Computer programers | 176.5 | 250.0 | 41.6 | 11,740 | 7,350 |
| Computer systems analysts | 88.1 | 142.0 | 61.2 | 7,010 | 5,390 |
| **Social Scientists** | | | | | |
| Economists | 66.0 | 110.0 | 66.7 | 6,190 | 4,400 |
| Political scientists | 1.9 | 3.5 | 84.2 | 240 | 160 |
| Psychologists | 30.0 | 60.5 | 101.7 | 4,280 | 3,050 |
| Sociologists | 1.3 | 2.0 | 53.8 | 130 | 70 |

# TABLE 3
# NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

|  | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80 |  |  |
|---|---|---|---|---|---|---|
|  |  |  |  | Total | Employment Change | Replacement Needs |
| **cept Technicians** |  |  |  |  |  |  |
|  | 16.0 | 18.2 | 13.8 | 960 | 220 | 740 |
|  | 94.1 | 130.0 | 38.2 | 7,890 | 3,590 | 4,300 |
|  | 30.0 | 42.0 | 40.0 | 3,310 | 1,200 | 2,110 |
|  | 16.0 | 22.0 | 22.2 | 1,070 | 400 | 670 |
|  | 129.0 | 156.9 | 21.6 | 8,380 | 2,790 | 5,590 |
| steopaths | 290.0 | 405.0 | 39.7 | 23,250 | 11,500 | 11,750 |
|  | 7.0 | 8.3 | 18.6 | 430 | 130 | 300 |
| s | 680.0 | 980.0 | 44.1 | 79,550 | 30,000 | 49,550 |
|  | 81.6 | 147.0 | 80.1 | 12,130 | 6,540 | 5,590 |
|  | 22.6 | 33.0 | 46.0 | 1,590 | 1,040 | 550 |
| d health | 1.0 | 1.7 | 70.0 | 350 | 70 | 280 |
| **s and Technicians** |  |  |  |  |  |  |
| nologists and technicians | 130.0 | 240.0 | 84.6 | 20,820 | 11,000 | 9,820 |
|  | 16.0 | 34.0 | 112.5 | 3,600 | 1,800 | 1,800 |
| hnologists and technicians | 12.3 | 30.0 | 143.9 | 3,070 | 1,770 | 1,300 |
| logists and technicians | 52.0 | 81.0 | 55.8 | 6,750 | 2,900 | 3,850 |
| nologists and technicians | 60.0 | 110.0 | 83.8 | 8,760 | 5,000 | 3,760 |
| **Health** |  |  |  |  |  |  |
|  | 49.0 | 67.0 | 36.7 | 2,320 | 1,800 | 520 |
| lers | 25.0 | 30.0 | 20.0 | 820 | 500 | 320 |
|  | 5.0 | 4.1 | -18.0 | 10 | -90 | 100 |
|  | 6.0 | 9.0 | 50.0 | 380 | 300 | 80 |
|  | 30.0 | 40.0 | 33.3 | 2,140 | 1,000 | 1,140 |
| numerical | 3.0 | 4.0 | 33.3 | 160 | 100 | 60 |
| , except health | 37.0 | 77.0 | 108.1 | 5,290 | 4,000 | 1,290 |
| s | 3.5 | 6.8 | 94.3 | 590 | 330 | 260 |
| ers | 176.5 | 250.0 | 41.6 | 11,740 | 7,350 | 4,390 |
| analysts | 88.1 | 142.0 | 61.2 | 7,010 | 5,390 | 1,620 |
|  | 66.0 | 110.0 | 66.7 | 6,190 | 4,400 | 1,790 |
| s | 1.9 | 3.5 | 84.2 | 240 | 160 | 80 |
|  | 30.0 | 60.5 | 101.7 | 4,280 | 3,050 | 1,230 |
|  | 1.3 | 2.0 | 53.8 | 130 | 70 | 60 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | | | | Annual Averag<br>1970-8 | |
|---|---|---|---|---|---|
| Occupation | 1970 Employment | 1980 Employment | Percent Change | Total | Employm Chang |
| Urban and regional planners | 9.0 | 18.0 | 100.0 | 1,130 | 900 |
| Other social scientists | 7.0 | 12.5 | 78.6 | 920 | 550 |
| Teachers | | | | | |
| Adult education teachers | 58.0 | 85.0 | 46.6 | 5,300 | 2,700 |
| Agriculture teachers | 5.0 | 6.2 | 24.0 | 230 | 120 |
| Art, drama, music teachers | 30.0 | 44.1 | 47.0 | 2,570 | 1,410 |
| Atmospheric, earth, marine | 4.5 | 7.5 | 66.7 | 400 | 300 |
| Biology teachers | 21.0 | 32.6 | 55.2 | 1,830 | 1,160 |
| Business, commerce teachers | 14.0 | 22.1 | 57.9 | 1,340 | 810 |
| Chemistry teachers | 16.0 | 18.5 | 15.6 | 590 | 250 |
| Coaches, physical education teachers | 17.0 | 21.2 | 24.7 | 880 | 420 |
| Economics teachers | 10.0 | 14.1 | 41.0 | 640 | 410 |
| Education teachers | 7.2 | 8.8 | 22.2 | 420 | 160 |
| Elementary school teachers | 1,400.0 | 1,535.0 | 9.6 | 98,910 | 13,500 |
| Engineering teachers | 17.0 | 20.3 | 19.4 | 700 | 330 |
| English teachers | 39.0 | 49.4 | 26.7 | 2,480 | 1,040 |
| Foreign language teachers | 20.7 | 32.6 | 57.5 | 2,250 | 1,190 |
| Health specialties teachers | 28.0 | 54.7 | 95.4 | 3,960 | 2,670 |
| History teachers | 16.0 | 17.6 | 10.0 | 540 | 160 |
| Home economics teachers | 4.2 | 6.2 | 47.6 | 480 | 200 |
| Law teachers | 2.9 | 4.9 | 69.0 | 290 | 200 |
| Mathematics teachers | 26.0 | 37.5 | 44.2 | 1,900 | 1,150 |
| Physics teachers | 14.0 | 13.2 | -5.7 | 120 | -80 |
| Preschool, kindergarten teachers | 133.0 | 160.0 | 20.3 | 10,790 | 2,700 |
| Psychology teachers | 13.0 | 22.9 | 76.2 | 1,420 | 990 |
| Secondary school teachers | 1,037.0 | 1,050.0 | 1.3 | 41,160 | 1,300 |
| Sociology teachers | 7.0 | 15.0 | 114.3 | 1,060 | 800 |
| Social science teachers, n.e.c. | 12.0 | 20.3 | 69.2 | 1,200 | 830 |
| Miscellaneous college and university teachers | 19.0 | 32.2 | 69.5 | 2,020 | 1,320 |
| College, university teachers, n.e.c. | 148.0 | 233.0 | 57.4 | 14,350 | 8,500 |
| Theology teachers | 5.0 | 8.8 | 76.0 | 550 | 380 |
| Trade, industrial teachers | 3.0 | 5.6 | 86.7 | 360 | 260 |
| Teachers, n.e.c., except college and university | 209.9 | 348.0 | 65.8 | 29,040 | 13,810 |
| Writers, Artists, Entertainers | | | | | |
| Actors | 10.7 | 13.6 | 27.1 | 730 | 290 |
| Athletes and kindred workers | 55.7 | 83.0 | 49.0 | 4,810 | 2,730 |
| Authors | 26.0 | 30.0 | 15.4 | 1,340 | 400 |

# TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80<br>Total | Employment Change | Replacement Needs |
|---|---|---|---|---|---|---|
| gional planners | 9.0 | 18.0 | 100.0 | 1,130 | 900 | 230 |
| scientists | 7.0 | 12.5 | 78.6 | 920 | 550 | 370 |
| | | | | | | |
| ion teachers | 58.0 | 85.0 | 46.6 | 5,300 | 2,700 | 2,600 |
| eachers | 5.0 | 6.2 | 24.0 | 230 | 120 | 110 |
| usic teachers | 30.0 | 44.1 | 47.0 | 2,570 | 1,410 | 1,160 |
| earth, marine | 4.5 | 7.5 | 66.7 | 400 | 300 | 100 |
| hers | 21.0 | 32.6 | 55.2 | 1,830 | 1,160 | 670 |
| mmerce teachers | 14.0 | 22.1 | 57.9 | 1,340 | 810 | 530 |
| achers | 16.0 | 18.5 | 15.6 | 590 | 250 | 340 |
| ysical education teachers | 17.0 | 21.2 | 24.7 | 880 | 420 | 460 |
| achers | 10.0 | 14.1 | 41.0 | 640 | 410 | 230 |
| chers | 7.2 | 8.8 | 22.2 | 420 | 160 | 260 |
| chool teachers | 1,400.0 | 1,535.0 | 9.6 | 98,910 | 13,500 | 85,410 |
| eachers | 17.0 | 20.3 | 19.4 | 700 | 330 | 370 |
| ers | 39.0 | 49.4 | 26.7 | 2,480 | 1,040 | 1,440 |
| age teachers | 20.7 | 32.6 | 57.5 | 2,250 | 1,190 | 1,060 |
| lties teachers | 28.0 | 54.7 | 95.4 | 3,960 | 2,670 | 1,290 |
| ers | 16.0 | 17.6 | 10.0 | 540 | 160 | 380 |
| ics teachers | 4.2 | 6.2 | 47.6 | 480 | 200 | 280 |
| | 2.9 | 4.9 | 69.0 | 290 | 200 | 90 |
| eachers | 26.0 | 37.5 | 44.2 | 1,900 | 1,150 | 750 |
| ers | 14.0 | 13.2 | -5.7 | 120 | -80 | 200 |
| ndergarten teachers | 133.0 | 160.0 | 20.3 | 10,790 | 2,700 | 8,090 |
| achers | 13.0 | 22.9 | 76.2 | 1,420 | 990 | 430 |
| ool teachers | 1,037.0 | 1,050.0 | 1.3 | 41,160 | 1,300 | 39,860 |
| hers | 7.0 | 15.0 | 114.3 | 1,060 | 800 | 260 |
| teachers, n.e.c. | 12.0 | 20.3 | 69.2 | 1,200 | 830 | 370 |
| college and university teachers | 19.0 | 32.2 | 69.5 | 2,020 | 1,320 | 700 |
| rsity teachers, n.e.c. | 148.0 | 233.0 | 57.4 | 14,350 | 8,500 | 5,850 |
| hers | 5.0 | 8.8 | 76.0 | 550 | 380 | 170 |
| ial teachers | 3.0 | 5.6 | 86.7 | 360 | 260 | 100 |
| c., except college and university | 209.9 | 348.0 | 65.8 | 29,040 | 13,810 | 15,230 |
| | | | | | | |
| Entertainers | | | | | | |
| | 10.7 | 13.6 | 27.1 | 730 | 290 | 440 |
| indred workers | 55.7 | 83.0 | 49.0 | 4,810 | 2,730 | 2,080 |
| | 26.0 | 30.0 | 15.4 | 1,340 | 400 | 940 |

# TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average O<br>1970-80<br>Total | <br><br>Employment Change |
|---|---|---|---|---|---|
| Dancers | 6.0 | 8.3 | 38.3 | 780 | 230 |
| Designers | 120.0 | 164.0 | 36.7 | 8,270 | 4,400 |
| Editors and reporters | 150.0 | 205.0 | 36.7 | 12,130 | 5,500 |
| Musicians and composers | 105.0 | 135.0 | 28.6 | 7,030 | 3,000 |
| Painters and sculptors | 105.0 | 146.0 | 39.0 | 8,620 | 4,100 |
| Photographers | 70.2 | 88.0 | 25.4 | 3,730 | 1,780 |
| Public relations men, writers | 82.0 | 119.0 | 45.1 | 7,000 | 3,700 |
| Radio, TV announcers | 21.0 | 24.9 | 18.6 | 640 | 390 |
| Writers, artists, entertainers, n.e.c. | 70.0 | 119.0 | 70.0 | 7,630 | 4,900 |
| Other Professional, Technical and Kindred Workers | | | | | |
| Accountants | 686.0 | 875.0 | 27.6 | 43,880 | 18,900 |
| Architects | 62.0 | 91.0 | 46.8 | 4,680 | 2,900 |
| Archivists and curators | 6.0 | 9.5 | 58.3 | 670 | 350 |
| Clergymen | 228.0 | 265.0 | 10.2 | 11,860 | 3,700 |
| Religious, except clergymen | 43.0 | 50.0 | 16.3 | 3,220 | 700 |
| Farm management advisors | 7.0 | 6.1 | -12.9 | 1,440 | -90 |
| Foresters, conservationists | 43.0 | 53.5 | 24.4 | 2,030 | 1,050 |
| Home management advisors | 5.2 | 5.1 | -1.9 | 320 | -10 |
| Judges | 13.7 | 15.0 | 9.5 | 1,120 | 130 |
| Lawyers | 287.0 | 385.0 | 34.1 | 21,160 | 9,800 |
| Librarians | 115.0 | 145.7 | 26.7 | 10,680 | 3,070 |
| Operations, systems research | 79.0 | 135.0 | 70.9 | 7,240 | 5,600 |
| Personnel labor relations | 286.0 | 478.0 | 67.1 | 30,120 | 19,200 |
| Research workers, n.e.c. | 115.0 | 195.0 | 69.6 | 12,290 | 8,000 |
| Recreation workers | 60.0 | 92.0 | 53.3 | 6,100 | 3,200 |
| Social workers | 230.0 | 360.0 | 56.6 | 27,010 | 13,000 |
| Vocational education counselors | 112.0 | 210.0 | 87.5 | 15,520 | 9,800 |
| **Managers, Officials, Proprietors** | | | | | |
| Buyers, Sales, Loan Managers | | | | | |
| Bank, financial managers | 398.0 | 600.0 | 50.8 | 33,920 | 20,200 |
| Buyers, shippers, farm products | 25.0 | 20.1 | -19.6 | 320 | -490 |
| Buyers, wholesale, retail products | 155.0 | 210.0 | 35.5 | 12,490 | 5,500 |
| Creditmen | 68.0 | 85.8 | 26.2 | 4,090 | 1,780 |
| Purchasing agents, buyers, n.e.c. | 175.0 | 234.0 | 33.7 | 11,090 | 5,900 |
| Sales manager, retail trade | 275.0 | 390.9 | 42.1 | 20,150 | 11,590 |
| Sales manager, except retail trade | 264.0 | 369.1 | 39.8 | 16,170 | 10,510 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80 Total | Annual Average Openings 1970-80 Employment Change | Annual Average Openings 1970-80 Replacement Needs |
|---|---|---|---|---|---|---|
| | 6.0 | 8.3 | 38.3 | 780 | 230 | 550 |
| | 120.0 | 164.0 | 36.7 | 8,270 | 4,400 | 3,870 |
| orters | 150.0 | 205.0 | 36.7 | 12,130 | 5,500 | 6,630 |
| composers | 105.0 | 135.0 | 28.6 | 7,030 | 3,000 | 4,030 |
| ulptors | 105.0 | 146.0 | 39.0 | 8,620 | 4,100 | 4,520 |
| | 70.2 | 88.0 | 25.4 | 3,730 | 1,780 | 1,950 |
| men, writers | 82.0 | 119.0 | 45.1 | 7,000 | 3,700 | 3,300 |
| uncers | 21.0 | 24.9 | 18.6 | 640 | 390 | 250 |
| , entertainers, n.e.c. | 70.0 | 119.0 | 70.0 | 7,630 | 4,900 | 2,730 |
| , Technical and Kindred Workers | | | | | | |
| | 686.0 | 875.0 | 27.6 | 43,880 | 18,900 | 24,980 |
| | 62.0 | 91.0 | 46.8 | 4,680 | 2,900 | 1,780 |
| curators | 6.0 | 9.5 | 58.3 | 670 | 350 | 320 |
| | 228.0 | 265.0 | 10.2 | 11,860 | 3,700 | 8,160 |
| pt clergymen | 43.0 | 50.0 | 16.3 | 3,220 | 700 | 2,520 |
| nt advisors | 7.0 | 6.1 | -12.9 | 1,440 | -90 | 1,530 |
| ervationists | 43.0 | 53.5 | 24.4 | 2,030 | 1,050 | 980 |
| nt advisors | 5.2 | 5.1 | -1.9 | 320 | -10 | 330 |
| | 13.7 | 15.0 | 9.5 | 1,120 | 130 | 990 |
| | 287.0 | 385.0 | 34.1 | 21,160 | 9,800 | 11,360 |
| | 115.0 | 145.7 | 26.7 | 10,680 | 3,070 | 7,610 |
| tems research | 79.0 | 135.0 | 70.9 | 7,240 | 5,600 | 1,640 |
| relations | 286.0 | 478.0 | 67.1 | 30,120 | 19,200 | 10,920 |
| rs, n.e.c. | 115.0 | 195.0 | 69.6 | 12,290 | 8,000 | 4,290 |
| ers | 60.0 | 92.0 | 53.3 | 6,100 | 3,200 | 2,900 |
| | 230.0 | 360.0 | 56.6 | 27,010 | 13,000 | 14,010 |
| ation counselors | 112.0 | 210.0 | 87.5 | 15,520 | 9,800 | 5,720 |
| roprietors | | | | | | |
| n Managers | | | | | | |
| managers | 398.0 | 600.0 | 50.8 | 33,920 | 20,200 | 13,720 |
| , farm products | 25.0 | 20.1 | -19.6 | 320 | -490 | 810 |
| le, retail products | 155.0 | 210.0 | 35.5 | 12,490 | 5,500 | 6,990 |
| | 68.0 | 85.8 | 26.2 | 4,090 | 1,780 | 2,310 |
| ts, buyers, n.e.c. | 175.0 | 234.0 | 33.7 | 11,090 | 5,900 | 5,190 |
| etail trade | 275.0 | 390.9 | 42.1 | 20,150 | 11,590 | 8,560 |
| xcept retail trade | 264.0 | 369.1 | 39.8 | 16,170 | 10,510 | 5,660 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Averag 1970-<br>Total | Employ Chan |
|---|---|---|---|---|---|
| Administrators, Public Inspectors | | | | | |
| Assessors, controllers and treasurers; local public admn. | 30.0 | 35.7 | 19.0 | 2,580 | 57 |
| Construction inspectors, public | 21.0 | 26.5 | 26.2 | 1,480 | 55 |
| Health administrators | 100.0 | 176.1 | 76.1 | 13,290 | 7,61 |
| Inspectors, except construction and public | 89.0 | 130.0 | 46.1 | 7,090 | 4,10 |
| Officials, administrators, public | 263.0 | 301.8 | 14.8 | 13,790 | 3,88 |
| Postmasters and mail supervisors | 35.0 | 31.2 | -10.9 | 1,120 | -38 |
| School administrators, college | 40.0 | 72.3 | 80.8 | 4,950 | 3,23 |
| School administrators, elementary and secondary | 174.0 | 216.8 | 24.6 | 10,220 | 4,28 |
| Other Managers, Officials, Proprietors | | | | | |
| Funeral directors | 40.0 | 41.2 | 3.0 | 1,540 | 12 |
| Managers, superintendants, building | 100.0 | 150.3 | 50.3 | 12,820 | 5,03 |
| Office managers, n.e.c. | 288.0 | 447.4 | 55.3 | 28,510 | 15,94 |
| Officers, pilots, pursers; ship | 32.0 | 32.2 | 0.6 | 750 | 2 |
| Officials of lodges, unions | 65.0 | 82.9 | 27.5 | 4,350 | 1,79 |
| Railroad conductors | 40.0 | 36.4 | -9.0 | 770 | -36 |
| Restaurant, cafe and bar managers | 463.0 | 552.6 | 19.4 | 26,580 | 8,96 |
| Other managers and administrators | 4,344.0 | 5,905.7 | 36.0 | 311,450 | 156,17 |
| **Sales Workers** | | | | | |
| Advertising Agents, Salesmen | 63.5 | 86.0 | 35.4 | 4,540 | 2,25 |
| Auctioneers | 5.5 | 7.0 | 27.3 | 380 | 15 |
| Demonstrators | 55.5 | 61.0 | 9.9 | 3,640 | 55 |
| Hucksters and Peddlers | 210.0 | 262.9 | 25.2 | 17,510 | 5,29 |
| Insurance Agents, Brokers, Etc. | 412.0 | 522.9 | 26.9 | 23,810 | 11,09 |
| Newsboys | 72.0 | 61.6 | -14.4 | 370 | -1,04 |
| Real Estate Agents, Brokers | 316.0 | 413.5 | 30.9 | 27,620 | 9,75 |
| Stock and Bond Salesmen | 101.8 | 140.5 | 38.0 | 7,550 | 3,87 |
| Sales Representatives, manufacturing | 394.0 | 476.1 | 20.8 | 18,780 | 8,21 |
| Sales Representatives, wholesale trade | 635.0 | 810.3 | 27.6 | 35,880 | 17,53 |
| Sales Clerks, retail trade | 2,190.0 | 2,782.1 | 27.0 | 194,450 | 59,21 |
| Salesmen, retail trade | 407.0 | 497.3 | 22.2 | 23,000 | 9,03 |
| Salesmen, service and construction | 151.2 | 218.8 | 44.7 | 13,810 | 6,76 |
| **Clerical Workers** | | | | | |
| Stenographers, Typists, Secretaries | | | | | |
| Secretaries, legal | 104.0 | 162.5 | 56.3 | 15,250 | 5,85 |
| Secretaries, medical | 79.0 | 140.2 | 77.5 | 13,530 | 6,12 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80 | | |
|---|---|---|---|---|---|---|
| | | | | Total | Employment Change | Replacement Needs |
| Public Inspectors | | | | | | |
| ontrollers and treasurers; local public admn. | 30.0 | 35.7 | 19.0 | 2,580 | 570 | 2,010 |
| inspectors, public | 21.0 | 26.5 | 26.2 | 1,480 | 550 | 930 |
| istrators | 100.0 | 176.1 | 76.1 | 13,290 | 7,610 | 5,680 |
| xcept construction and public | 89.0 | 130.0 | 46.1 | 7,090 | 4,100 | 2,990 |
| ninistrators, public | 263.0 | 301.8 | 14.8 | 13,790 | 3,880 | 9,910 |
| nd mail supervisors | 35.0 | 31.2 | -10.9 | 1,120 | -380 | 1,500 |
| istrators, college | 40.0 | 72.3 | 80.8 | 4,950 | 3,230 | 1,720 |
| istrators, elementary and secondary | 174.0 | 216.8 | 24.6 | 10,220 | 4,280 | 5,940 |
| Officials, Proprietors | | | | | | |
| tors | 40.0 | 41.2 | 3.0 | 1,540 | 120 | 1,420 |
| perintendants, building | 100.0 | 150.3 | 50.3 | 12,820 | 5,030 | 7,790 |
| rs, n.e.c. | 288.0 | 447.4 | 55.3 | 28,510 | 15,940 | 12,570 |
| s, pursers; ship | 32.0 | 32.2 | 0.6 | 750 | 20 | 730 |
| dges, unions | 65.0 | 82.9 | 27.5 | 4,350 | 1,790 | 2,560 |
| uctors | 40.0 | 36.4 | -9.0 | 770 | -360 | 1,130 |
| afe and bar managers | 463.0 | 552.6 | 19.4 | 26,580 | 8,960 | 17,620 |
| s and administrators | 4,344.0 | 5,905.7 | 36.0 | 311,450 | 156,170 | 155,280 |
| ts, Salesmen | 63.5 | 86.0 | 35.4 | 4,540 | 2,250 | 2,290 |
| | 5.5 | 7.0 | 27.3 | 380 | 150 | 230 |
| | 55.5 | 61.0 | 9.9 | 3,640 | 550 | 3,090 |
| ddlers | 210.0 | 262.9 | 25.2 | 17,510 | 5,290 | 12,220 |
| Brokers, Etc. | 412.0 | 522.9 | 26.9 | 23,810 | 11,090 | 12,720 |
| | 72.0 | 61.6 | -14.4 | 370 | -1,040 | 1,410 |
| ts, Brokers | 316.0 | 413.5 | 30.9 | 27,620 | 9,750 | 17,870 |
| lesmen | 101.8 | 140.5 | 38.0 | 7,550 | 3,870 | 3,680 |
| tives, manufacturing | 394.0 | 476.1 | 20.8 | 18,780 | 8,210 | 10,570 |
| tives, wholesale trade | 635.0 | 810.3 | 27.6 | 35,880 | 17,530 | 18,350 |
| il trade | 2,190.0 | 2,782.1 | 27.0 | 194,450 | 59,210 | 135,240 |
| rade | 407.0 | 497.3 | 22.2 | 23,000 | 9,030 | 13,970 |
| and construction | 151.2 | 218.8 | 44.7 | 13,810 | 6,760 | 7,050 |
| pists, Secretaries | | | | | | |
| al | 104.0 | 162.5 | 56.3 | 15,250 | 5,850 | 9,400 |
| dical | 79.0 | 140.2 | 77.5 | 13,530 | 6,120 | 7,410 |

# TABLE 3
# NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average 1970-80 | |
|---|---|---|---|---|---|
| | | | | Total | Employme Change |
| Secretaries, other | 2,602.1 | 3,738.9 | 43.7 | 330,220 | 113,680 |
| Stenographers | 128.0 | 96.0 | -25.0 | 4,620 | -3,200 |
| Typists | 973.0 | 1,264.0 | 29.9 | 108,960 | 29,100 |
| **Office Machine Operators** | | | | | |
| Bookkeeping, billing operators | 68.5 | 85.4 | 24.7 | 6,610 | 1,690 |
| Calculating machine operators | 34.0 | 36.6 | 7.6 | 2,450 | 260 |
| Computer, peripheral equipment | 150.0 | 246.1 | 64.1 | 14,310 | 9,610 |
| Duplicating machine operators | 19.0 | 26.6 | 40.0 | 1,860 | 760 |
| Keypunch operators | 300.0 | 265.0 | -11.7 | 15,400 | -3,500 |
| Tabulating machine operators | 9.0 | 4.4 | -51.1 | -210 | -460 |
| Other office machine operators | 52.0 | 77.2 | 48.5 | 5,950 | 2,520 |
| **Other Clerical Workers** | | | | | |
| Bank tellers | 287.0 | 400.0 | 39.4 | 31,810 | 11,300 |
| Billing clerks | 123.0 | 193.3 | 57.2 | 16,480 | 7,030 |
| Bookkeepers | 1,540.0 | 1,850.0 | 20.1 | 125,750 | 31,000 |
| Cashiers | 969.0 | 1,250.0 | 29.0 | 93,780 | 28,100 |
| Clerical assistants, social welfare workers | 1.5 | 3.0 | 100.0 | 2,760 | 1,500 |
| Clerical supervisors, n.e.c. | 192.0 | 248.8 | 29.6 | 13,200 | 5,680 |
| Collectors, bill and account | 60.0 | 85.2 | 42.0 | 5,370 | 2,520 |
| Counter clerks, except food | 309.0 | 443.2 | 43.4 | 34,330 | 13,420 |
| Dispatcher, starter, vehicle | 64.0 | 84.9 | 32.7 | 4,110 | 2,090 |
| Enumerators and interviewers | 65.0 | 65.0 | 0 | 3,150 | 0 |
| Estimators, investigators, n.e.c. | 329.0 | 449.7 | 36.7 | 27,490 | 12,070 |
| Expeditors, production controllers | 200.0 | 250.5 | 25.3 | 10,840 | 5,050 |
| File clerks | 270.0 | 320.0 | 18.5 | 24,680 | 3,000 |
| Insurance adjusters, examiners and investigators | 105.0 | 136.7 | 30.2 | 6,740 | 3,170 |
| Library attendants, assistants | 120.0 | 167.0 | 39.2 | 13,780 | 4,700 |
| Mail carriers, post office | 268.0 | 285.0 | 6.3 | 6,980 | 1,700 |
| Mail handlers, except post office | 130.0 | 175.4 | 34.9 | 11,490 | 4,540 |
| Messengers and office boys | 56.0 | 56.2 | 0.4 | 2,890 | 20 |
| Meter readers, utilities | 37.0 | 38.4 | 3.8 | 730 | 140 |
| Payroll, time keeping clerks | 175.0 | 222.5 | 27.1 | 14,750 | 4,750 |
| Postal clerks | 315.0 | 320.0 | 1.6 | 10,060 | 500 |
| Proofreaders | 27.0 | 37.3 | 38.1 | 5,070 | 1,030 |
| Real estate appraisers | 24.0 | 33.6 | 40.0 | 2,030 | 960 |
| Receptionists | 423.0 | 570.0 | 34.8 | 50,300 | 14,700 |
| Shipping, receiving clerks | 438.0 | 500.0 | 14.2 | 17,310 | 6,200 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | | | | Annual Average Openings 1970-80 | | |
|---|---|---|---|---|---|---|
| | 1970 Employment | 1980 Employment | Percent Change | Total | Employment Change | Replacement Needs |
| ther | 2,602.1 | 3,738.9 | 43.7 | 330,220 | 113,680 | 216,540 |
| | 128.0 | 96.0 | -25.0 | 4,620 | -3,200 | 7,820 |
| | 973.0 | 1,264.0 | 29.9 | 108,960 | 29,100 | 79,860 |
| perators | | | | | | |
| billing operators | 68.5 | 85.4 | 24.7 | 6,610 | 1,690 | 4,920 |
| achine operators | 34.0 | 36.6 | 7.6 | 2,450 | 260 | 2,190 |
| ipheral equipment | 150.0 | 246.1 | 64.1 | 14,310 | 9,610 | 4,700 |
| achine operators | 19.0 | 26.6 | 40.0 | 1,860 | 760 | 1,100 |
| ators | 300.0 | 265.0 | -11.7 | 15,400 | -3,500 | 18,900 |
| chine operators | 9.0 | 4.4 | -51.1 | -210 | -460 | 250 |
| achine operators | 52.0 | 77.2 | 48.5 | 5,950 | 2,520 | 3,430 |
| kers | | | | | | |
| | 287.0 | 400.0 | 39.4 | 31,810 | 11,300 | 20,510 |
| | 123.0 | 193.3 | 57.2 | 16,480 | 7,030 | 9,450 |
| | 1,540.0 | 1,850.0 | 20.1 | 125,750 | 31,000 | 94,750 |
| | 969.0 | 1,250.0 | 29.0 | 93,780 | 28,100 | 65,680 |
| ants, social welfare workers | 1.5 | 3.0 | 100.0 | 2,760 | 1,500 | 1,260 |
| visors, n.e.c. | 192.0 | 248.8 | 29.6 | 13,200 | 5,680 | 7,520 |
| and account | 60.0 | 85.2 | 42.0 | 5,370 | 2,520 | 2,850 |
| , except food | 309.0 | 443.2 | 43.4 | 34,330 | 13,420 | 20,910 |
| rter, vehicle | 64.0 | 84.9 | 32.7 | 4,110 | 2,090 | 2,020 |
| d interviewers | 65.0 | 65.0 | 0 | 3,150 | 0 | 3,150 |
| estigators, n.e.c. | 329.0 | 449.7 | 36.7 | 27,490 | 12,070 | 15,420 |
| duction controllers | 200.0 | 250.5 | 25.3 | 10,840 | 5,050 | 5,790 |
| | 270.0 | 320.0 | 18.5 | 24,680 | 3,000 | 19,680 |
| ters, examiners and investigators | 105.0 | 136.7 | 30.2 | 6,740 | 3,170 | 3,570 |
| nts, assistants | 120.0 | 167.0 | 39.2 | 13,780 | 4,700 | 9,080 |
| ost office | 268.0 | 285.0 | 6.3 | 6,980 | 1,700 | 5,280 |
| xcept post office | 130.0 | 175.4 | 34.9 | 11,490 | 4,540 | 6,950 |
| office boys | 56.0 | 56.2 | 0.4 | 2,890 | 20 | 2,870 |
| tilities | 37.0 | 38.4 | 3.8 | 730 | 140 | 590 |
| eping clerks | 175.0 | 222.5 | 27.1 | 14,750 | 4,750 | 10,000 |
| | 315.0 | 320.0 | 1.6 | 10,060 | 500 | 9,560 |
| | 27.0 | 37.3 | 38.1 | 5,070 | 1,030 | 4,040 |
| raisers - | 24.0 | 33.6 | 40.0 | 2,030 | 960 | 1,070 |
| | 423.0 | 570.0 | 34.8 | 50,300 | 14,700 | 35,600 |
| ing clerks | 438.0 | 500.0 | 14.2 | 17,310 | 6,200 | 11,110 |

# TABLE 3
# NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average Op 1970-80<br>Total | <br>Employment Change |
|---|---|---|---|---|---|
| Statistical clerks | 291.0 | 350.0 | 20.3 | 22,410 | 5,900 |
| Stock clerks, store keepers | 496.0 | 625.7 | 26.1 | 28,620 | 12,970 |
| Teacher aides, except monitors | 150.0 | 286.4 | 90.9 | 23,760 | 13,640 |
| Telegraph messengers | 2.5 | 1.5 | -40.0 | -60 | -100 |
| Telegraph operators | 12.0 | 8.8 | -26.7 | 60 | -320 |
| Telephone operators | 388.0 | 404.4 | 4.2 | 29,250 | 1,640 |
| Ticket station, express agents | 94.0 | 115.1 | 22.4 | 5,930 | 2,110 |
| Weighters | 46.0 | 47.6 | 3.5 | 1,680 | 160 |
| Miscellaneous clerical workers, n.e.c. | 1,206.5 | 1,931.9 | 60.1 | 153,670 | 72,540 |
| **Craftsmen, Foremen, Kindred Workers** | | | | | |
| Construction Craftsmen | | | | | |
| Carpenters | 985.0 | 1,125.0 | 14.2 | 40,790 | 14,000 |
| Carpenter apprentices | 8.9 | 11.0 | 23.6 | 250 | 210 |
| Brickmasons and stonemasons | 172.0 | 205.0 | 19.2 | 6,540 | 3,300 |
| Brickmason and stonemason apprentices | 4.5 | 4.4 | -2.2 | 30 | -10 |
| Bulldozer operators | 100.0 | 121.0 | 21.0 | 3,990 | 2,100 |
| Cement and concrete finishers | 65.0 | 94.1 | 44.8 | 4,230 | 2,910 |
| Electricians | 450.0 | 581.4 | 29.2 | 22,830 | 13,140 |
| Electrician apprentices | 21.3 | 29.9 | 40.4 | 870 | 860 |
| Excavating, grading, machine operators | 280.0 | 346.2 | 23.6 | 12,250 | 6,620 |
| Floor layers, except tile setters | 23.5 | 29.9 | 27.2 | 1,100 | 640 |
| Painters, construction, maintenance | 400.0 | 435.6 | 8.9 | 15,460 | 3,560 |
| Painter apprentices | 1.6 | 1.7 | 6.3 | 30 | 10 |
| Paperhangers | 10.0 | 13.7 | 37.0 | 890 | 370 |
| Plasterers | 28.0 | 30.0 | 7.1 | 900 | 200 |
| Plasterer apprentices | 0.5 | 0.4 | -20.0 | 0 | -10 |
| Plumbers and pipefitters | 355.0 | 460.0 | 29.6 | 19,260 | 10,500 |
| Plumber and pipefitter apprentices | 14.0 | 18.9 | 35.0 | 560 | 490 |
| Roofers and slaters | 63.0 | 95.0 | 50.8 | 4,280 | 3,200 |
| Structural metal craftsmen | 79.0 | 100.0 | 26.6 | 3,520 | 2,100 |
| Tilesetters | 32.0 | 36.0 | 12.5 | 910 | 400 |
| Foremen, n.e.c. | 1,375.0 | 1,562.4 | 13.6 | 50,900 | 18,740 |
| Metalworking Craftsmen, except Mechanic | | | | | |
| Blacksmiths | 10.0 | 9.6 | -4.0 | 390 | -40 |
| Boilermakers | 30.0 | 35.5 | 18.3 | 1,320 | 550 |
| Heat treaters, annealers, etc. | 23.0 | 21.7 | -5.7 | 360 | -130 |
| Foregemen and hammermen | 18.0 | 21.2 | 17.8 | 680 | 320 |
| Job and die setters, metal | 100.0 | 135.1 | 35.1 | 5,580 | 3,510 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | | | | Annual Average Openings 1970-80 | | |
|---|---|---|---|---|---|---|
| | 1970 Employment | 1980 Employment | Percent Change | Total | Employment Change | Replacement Needs |
| ks | 291.0 | 350.0 | 20.3 | 22,410 | 5,900 | 16,510 |
| tore keepers | 496.0 | 625.7 | 26.1 | 28,620 | 12,970 | 15,650 |
| except monitors | 150.0 | 286.4 | 90.9 | 23,760 | 13,640 | 10,120 |
| engers | 2.5 | 1.5 | -40.0 | -60 | -100 | 40 |
| ators | 12.0 | 8.8 | -26.7 | 60 | -320 | 380 |
| ators | 388.0 | 404.4 | 4.2 | 29,250 | 1,640 | 27,610 |
| express agents | 94.0 | 115.1 | 22.4 | 5,930 | 2,110 | 3,820 |
| | 46.0 | 47.6 | 3.5 | 1,680 | 160 | 1,520 |
| clerical workers, n.e.c. | 1,206.5 | 1,931.9 | 60.1 | 153,670 | 72,540 | 81,130 |
| Kindred Workers | | | | | | |
| smen | | | | | | |
| | 985.0 | 1,125.0 | 14.2 | 40,790 | 14,000 | 26,790 |
| ntices | 8.9 | 11.0 | 23.6 | 250 | 210 | 40 |
| d stonemasons | 172.0 | 205.0 | 19.2 | 6,540 | 3,300 | 3,240 |
| stonemason apprentices | 4.5 | 4.4 | -2.2 | 30 | -10 | 40 |
| tors | 100.0 | 121.0 | 21.0 | 3,990 | 2,100 | 1,890 |
| crete finishers | 65.0 | 94.1 | 44.8 | 4,230 | 2,910 | 1,320 |
| | 450.0 | 581.4 | 29.2 | 22,830 | 13,140 | 9,690 |
| entices | 21.3 | 29.9 | 40.4 | 870 | 860 | 10 |
| ding, machine operators | 280.0 | 346.2 | 23.6 | 12,250 | 6,620 | 5,630 |
| cept tile setters | 23.5 | 29.9 | 27.2 | 1,100 | 640 | 460 |
| uction, maintenance | 400.0 | 435.6 | 8.9 | 15,460 | 3,560 | 11,900 |
| ces | 1.6 | 1.7 | 6.3 | 30 | 10 | 20 |
| | 10.0 | 13.7 | 37.0 | 890 | 370 | 520 |
| | 28.0 | 30.0 | 7.1 | 900 | 200 | 700 |
| tices | 0.5 | 0.4 | -20.0 | 0 | -10 | 10 |
| pefitters | 355.0 | 460.0 | 29.6 | 19,260 | 10,500 | 8,760 |
| efitter apprentices | 14.0 | 18.9 | 35.0 | 560 | 490 | 70 |
| ers | 63.0 | 95.0 | 50.8 | 4,280 | 3,200 | 1,080 |
| craftsmen | 79.0 | 100.0 | 26.6 | 3,520 | 2,100 | 1,420 |
| | 32.0 | 36.0 | 12.5 | 910 | 400 | 510 |
| | 1,375.0 | 1,562.4 | 13.6 | 50,900 | 18,740 | 32,160 |
| men, except Mechanic | | | | | | |
| | 10.0 | 9.6 | -4.0 | 390 | -40 | 430 |
| | 30.0 | 35.5 | 18.3 | 1,320 | 550 | 770 |
| nealers, etc. | 23.0 | 21.7 | -5.7 | 360 | -130 | 490 |
| ammermen | 18.0 | 21.2 | 17.8 | 680 | 320 | 360 |
| rs, metal | 100.0 | 135.1 | 35.1 | 5,580 | 3,510 | 2,070 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average 1970-80 Total | Employme Change |
|---|---|---|---|---|---|
| Machinists | 361.0 | 400.0 | 10.8 | 11,960 | 3,900 |
| Machinist apprentices | 10.0 | 11.2 | 12.0 | 183 | 120 |
| Millwrights | 81.0 | 90.7 | 12.0 | 2,730 | 970 |
| Molders, metal | 55.0 | 56.5 | 2.7 | 1,200 | 150 |
| Molder apprentices | 0.8 | 0.9 | 12.5 | 10 | 10 |
| Pattern and model makers | 42.0 | 40.8 | -2.9 | 880 | -120 |
| Rollers and finishers, metal | 23.0 | 24.5 | 6.5 | 670 | 150 |
| Sheet metal workers, tinsmiths | 155.0 | 162.1 | 4.6 | 3,390 | 710 |
| Sheet metal apprentices | 6.0 | 8.2 | 36.7 | 240 | 220 |
| Tool and diemakers | 168.0 | 180.0 | 7.1 | 4,890 | 1,200 |
| Tool and diemaker apprentices | 10.0 | 14.0 | 40.0 | 440 | 400 |
| **Mechanics, Repairmen, Installers** | | | | | |
| Air conditioning, heating, refrigeration | 130.0 | 215.0 | 65.4 | 11,460 | 8,500 |
| Aircrafts | 120.0 | 160.0 | 33.3 | 5,990 | 4,000 |
| Automobile accessories installers | 6.0 | 6.2 | 3.3 | 100 | 20 |
| Automobile body repairmen | 159.0 | 175.0 | 10.1 | 3,750 | 1,600 |
| Automobile mechanics | 837.0 | 975.0 | 16.5 | 28,750 | 13,800 |
| Automobile mechanic apprentices | 2.6 | 3.5 | 34.6 | 100 | 90 |
| Data processing machine repairmen | 36.0 | 72.6 | 101.7 | 3,990 | 3,660 |
| Farm implement | 46.3 | 50.0 | 8.0 | 1,470 | 370 |
| Heavy equipment mechanics, including diesel | 687.0 | 875.4 | 27.4 | 33,760 | 18,840 |
| Household appliance mechanics | 120.0 | 156.9 | 30.8 | 6,260 | 3,690 |
| Loom fixers | 18.0 | 17.2 | -4.4 | 320 | -80 |
| Office machine repairmen | 64.5 | 85.0 | 31.8 | 2,940 | 2,050 |
| Radio, television repairmen | 137.0 | 150.0 | 9.5 | 3,700 | 1,300 |
| Railroad, car shop repairmen | 54.0 | 48.2 | -10.7 | 730 | -580 |
| Mechanics, except automobile apprentice | 7.0 | 9.9 | 41.4 | 940 | 290 |
| Other mechanics and repairmen | 224.0 | 267.8 | 19.6 | 9,720 | 4,380 |
| **Printing Trade Craftsmen** | | | | | |
| Bookbinders | 32.0 | 35.7 | 11.6 | 1,840 | 370 |
| Compositors and typesetters | 170.0 | 175.4 | 3.2 | 5,670 | 540 |
| Electrotypers, stereotypers | 7.0 | 6.9 | -1.4 | 210 | -10 |
| Engravers, except photoengravers | 9.3 | 9.8 | 5.4 | 360 | 50 |
| Photoengravers, lithographers | 33.5 | 45.8 | 36.7 | 2,100 | 1,230 |
| Pressmen and plate printers | 139.0 | 165.0 | 18.7 | 5,460 | 2,600 |
| Pressmen and apprentices | 2.8 | 4.1 | 46.4 | 140 | 130 |
| Printing apprentices, except press | 6.0 | 4.0 | -33.3 | -160 | -200 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | | | | Annual Average Openings 1970-80 | | |
|---|---|---|---|---|---|---|
| | 1970 Employment | 1980 Employment | Percent Change | Total | Employment Change | Replacement Needs |
| | 361.0 | 400.0 | 10.8 | 11,960 | 3,900 | 8,060 |
| pprentices | 10.0 | 11.2 | 12.0 | 183 | 120 | 63 |
| | 81.0 | 90.7 | 12.0 | 2,730 | 970 | 1,760 |
| al | 55.0 | 56.5 | 2.7 | 1,200 | 150 | 1,050 |
| entices | 0.8 | 0.9 | 12.5 | 10 | 10 | 0 |
| model makers | 42.0 | 40.8 | -2.9 | 880 | -120 | 1,000 |
| finishers, metal | 23.0 | 24.5 | 6.5 | 670 | 150 | 520 |
| workers, tinsmiths | 155.0 | 162.1 | 4.6 | 3,390 | 710 | 2,680 |
| apprentices | 6.0 | 8.2 | 36.7 | 240 | 220 | 20 |
| emakers | 168.0 | 180.0 | 7.1 | 4,890 | 1,200 | 3,690 |
| emaker apprentices | 10.0 | 14.0 | 40.0 | 440 | 400 | 40 |
| airmen, Installers | | | | | | |
| ning, heating, refrigeration | 130.0 | 215.0 | 65.4 | 11,460 | 8,500 | 2,960 |
| | 120.0 | 160.0 | 33.3 | 5,990 | 4,000 | 1,990 |
| accessories installers | 6.0 | 6.2 | 3.3 | 100 | 20 | 80 |
| body repairmen | 159.0 | 175.0 | 10.1 | 3,750 | 1,600 | 2,150 |
| nechanics | 837.0 | 975.0 | 16.5 | 28,750 | 13,800 | 14,950 |
| mechanic apprentices | 2.6 | 3.5 | 34.6 | 100 | 90 | 10 |
| sing machine repairmen | 36.0 | 72.6 | 101.7 | 3,990 | 3,660 | 330 |
| ent | 46.3 | 50.0 | 8.0 | 1,470 | 370 | 1,100 |
| ment mechanics, including diesel | 687.0 | 875.4 | 27.4 | 33,760 | 18,840 | 14,920 |
| ppliance mechanics | 120.0 | 156.9 | 30.8 | 6,260 | 3,690 | 2,570 |
| | 18.0 | 17.2 | -4.4 | 320 | -80 | 400 |
| ne repairmen | 64.5 | 85.0 | 31.8 | 2,940 | 2,050 | 890 |
| ision repairmen | 137.0 | 150.0 | 9.5 | 3,700 | 1,300 | 2,400 |
| shop repairmen | 54.0 | 48.2 | -10.7 | 730 | -580 | 1,310 |
| xcept automobile apprentice | 7.0 | 9.9 | 41.4 | 940 | 290 | 650 |
| nics and repairmen | 224.0 | 267.8 | 19.6 | 9,720 | 4,380 | 5,340 |
| Craftsmen | | | | | | |
| | 32.0 | 35.7 | 11.6 | 1,840 | 370 | 1,470 |
| and typesetters | 170.0 | 175.4 | 3.2 | 5,670 | 540 | 5,130 |
| , stereotypers | 7.0 | 6.9 | -1.4 | 210 | -10 | 220 |
| xcept photoengravers | 9.3 | 9.8 | 5.4 | 360 | 50 | 310 |
| rs, lithographers | 33.5 | 45.8 | 36.7 | 2,100 | 1,230 | 870 |
| plate printers | 139.0 | 165.0 | 18.7 | 5,460 | 2,600 | 2,860 |
| apprentices | 2.8 | 4.1 | 46.4 | 140 | 130 | 10 |
| entices, except press | 6.0 | 4.0 | -33.3 | -160 | -200 | 40 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average O 1970-80<br>Total | <br>Employmen Change |
|---|---|---|---|---|---|
| Transportation, Public Utilities Craftsmen | | | | | |
| Electric power linemen, cablemen | 100.0 | 113.4 | 13.4 | 2,460 | 1,340 |
| Locomotive engineers | 37.5 | 34.9 | -6.9 | 980 | -260 |
| Locomotive firemen | 18.0 | 11.2 | -37.8 | -440 | -680 |
| Power station operators | 17.3 | 16.3 | -5.8 | 260 | -100 |
| Telephone installers, repairmen | 280.0 | 339.1 | 21.1 | 8,850 | 5,910 |
| Telephone linemen, splicers | 52.0 | 53.0 | 1.9 | 460 | 100 |
| Other Craftsmen, Kindred Workers | | | | | |
| Bakers | 125.0 | 128.4 | 2.7 | 4,770 | 340 |
| Cabinetmakers | 75.0 | 83.1 | 10.8 | 3,220 | 810 |
| Carpet installers | 47.0 | 60.9 | 29.6 | 1,910 | 1,390 |
| Cranemen, derrickmen, hoistmen | 170.0 | 193.5 | 13.8 | 5,620 | 2,350 |
| Decorators, window dressers | 70.0 | 96.4 | 37.7 | 6,420 | 2,640 |
| Dental laboratory technicians | 30.0 | 38.5 | 28.3 | 1,920 | 850 |
| Furniture and wood finishers | 23.0 | 23.7 | 3.0 | 880 | 70 |
| Furriers | 2.6 | 1.9 | -26.9 | 70 | -70 |
| Glaziers | 25.0 | 33.1 | 32.4 | 1,280 | 810 |
| Inspectors, log and lumber | 17.0 | 19.1 | 12.4 | 720 | 210 |
| Inspectors, other | 128.0 | 147.6 | 15.3 | 5,800 | 1,960 |
| Jewelers and watchmakers | 41.5 | 44.0 | 6.0 | 2,060 | 250 |
| Millers, grain, flour, seed | 8.8 | 10.0 | 13.6 | 370 | 120 |
| Motion picture projectionists | 16.0 | 17.4 | 8.8 | 950 | 140 |
| Opticians, lens grinder, polisher | 27.0 | 37.0 | 37.0 | 1,940 | 1,000 |
| Piano, organ tuners, repairmen | 7.0 | 7.0 | 0 | 340 | -10 |
| Shipfitters | 11.0 | 13.7 | 24.5 | 490 | 270 |
| Shoe repairmen | 31.0 | 23.0 | -25.8 | 780 | -800 |
| Sign painters and letterers | 20.0 | 23.0 | 15.0 | 1,130 | 300 |
| Stationary engineers | 178.0 | 180.0 | 1.1 | 5,320 | 200 |
| Stone cutters, stone carvers | 7.0 | 8.2 | 15.7 | 320 | 120 |
| Tailors | 68.0 | 69.9 | 2.8 | 3,610 | 190 |
| Upholsterers | 68.0 | 81.2 | 19.4 | 3,590 | 1,320 |
| Craftsmen, kindred workers, n.e.c. | 80.0 | 88.9 | 16.1 | 3,020 | 890 |
| Former armed forces members | 5.0 | - | - | 110 | - |
| Craft apprentices, n.e.c. | 10.7 | 12.0 | 12.1 | 180 | 130 |
| **Operatives** | | | | | |
| Operatives, except Transport | | | | | |
| Semiskilled metalworking | | | | | |

# TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | | | | Annual Average Openings 1970-80 | | |
|---|---|---|---|---|---|---|
| | 1970 Employment | 1980 Employment | Percent Change | Total | Employment Change | Replacement Needs |
| ublic Utilities Craftsmen | | | | | | |
| linemen, cablemen | 100.0 | 113.4 | 13.4 | 2,460 | 1,340 | 1,120 |
| gineers | 37.5 | 34.9 | -6.9 | 980 | -260 | 1,240 |
| remen | 18.0 | 11.2 | -37.8 | -440 | -680 | 240 |
| operators | 17.3 | 16.3 | -5.8 | 260 | -100 | 360 |
| tallers, repairmen | 280.0 | 339.1 | 21.1 | 8,850 | 5,910 | 2,940 |
| emen, splicers | 52.0 | 53.0 | 1.9 | 460 | 100 | 360 |
| Kindred Workers | | | | | | |
| | 125.0 | 128.4 | 2.7 | 4,770 | 340 | 4,430 |
| | 75.0 | 83.1 | 10.8 | 3,220 | 810 | 2,410 |
| ers | 47.0 | 60.9 | 29.6 | 1,910 | 1,390 | 520 |
| rickmen, hoistmen | 170.0 | 193.5 | 13.8 | 5,620 | 2,350 | 3,270 |
| indow dressers | 70.0 | 96.4 | 37.7 | 6,420 | 2,640 | 3,780 |
| ory technicians | 30.0 | 38.5 | 28.3 | 1,920 | 850 | 1,070 |
| wood finishers | 23.0 | 23.7 | 3.0 | 880 | 70 | 810 |
| | 2.6 | 1.9 | -26.9 | 70 | -70 | 140 |
| | 25.0 | 33.1 | 32.4 | 1,280 | 810 | 470 |
| and lumber | 17.0 | 19.1 | 12.4 | 720 | 210 | 510 |
| er | 128.0 | 147.6 | 15.3 | 5,800 | 1,960 | 3,840 |
| atchmakers | 41.5 | 44.0 | 6.0 | 2,060 | 250 | 1,810 |
| flour, seed | 8.8 | 10.0 | 13.6 | 370 | 120 | 250 |
| projectionists | 16.0 | 17.4 | 8.8 | 950 | 140 | 810 |
| s grinder, polisher | 27.0 | 37.0 | 37.0 | 1,940 | 1,000 | 940 |
| uners, repairmen | 7.0 | 7.0 | 0 | 340 | -10 | 350 |
| | 11.0 | 13.7 | 24.5 | 490 | 270 | 220 |
| | 31.0 | 23.0 | -25.8 | 780 | -800 | 1,580 |
| nd letterers | 20.0 | 23.0 | 15.0 | 1,130 | 300 | 830 |
| ineers | 178.0 | 180.0 | 1.1 | 5,320 | 200 | 5,120 |
| stone carvers | 7.0 | 8.2 | 15.7 | 320 | 120 | 200 |
| | 68.0 | 69.9 | 2.8 | 3,610 | 190 | 3,420 |
| | 68.0 | 81.2 | 19.4 | 3,590 | 1,320 | 2,270 |
| dred workers, n.e.c. | 80.0 | 88.9 | 16.1 | 3,020 | 890 | 2,130 |
| orces members | 5.0 | - | - | 110 | - | 110 |
| es, n.e.c. | 10.7 | 12.0 | 12.1 | 180 | 130 | 50 |

t Transport
talworking

# TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average 1970-8<br>Total | <br>Employm Chang |
|---|---|---|---|---|---|
| Drill press operatives | 76.0 | 87.8 | 15.5 | 3,250 | 1,180 |
| Furnacemen, smeltermen, pourers | 74.4 | 84.9 | 14.1 | 2,510 | 1,050 |
| Grinding machine operatives | 145.0 | 180.9 | 24.8 | 6,950 | 3,590 |
| Heaters metal | 7.5 | 6.8 | -9.3 | 80 | -70 |
| Lathe, milling machine operatives | 155.0 | 181.8 | 17.3 | 5,910 | 2,680 |
| Metal platers | 36.0 | 43.5 | 20.8 | 1,490 | 750 |
| Other precision machine operatives | 76.5 | 100.2 | 31.0 | 4,160 | 2,370 |
| Punch stamping press operatives | 180.0 | 214.0 | 18.9 | 8,600 | 3,400 |
| Solderers | 42.4 | 29.4 | -30.7 | 410 | -1,300 |
| Welders and flame cutters | 538.0 | 688.7 | 28.0 | 25,430 | 15,070 |
| Semiskilled textile | | | | | |
| Carding, lapping, combing | 17.8 | 11.8 | -33.7 | -140 | -600 |
| Knitters, loopers and toppers | 34.6 | 29.6 | -14.5 | 900 | -500 |
| Spinners, twisters, winders | 150.0 | 147.3 | -1.8 | 6,050 | -270 |
| Weavers | 46.0 | 38.3 | -16.7 | 930 | -770 |
| Other textile operatives | 190.0 | 177.9 | -6.4 | 5,690 | -1,210 |
| Semiskilled packing, inspecting | | | | | |
| Checkers, examiners, etc., manufacturing | 690.0 | 811.1 | 17.6 | 38,600 | 12,110 |
| Graders and sorters, manufacturing | 45.3 | 50.9 | 12.4 | 35,300 | 560 |
| Meat wrappers, retail trade | 46.5 | 60.3 | 29.7 | 3,840 | 1,380 |
| Packers, wrappers, except meat, produce | 649.0 | 751.9 | 15.9 | 39,010 | 10,290 |
| Produce graders, packers, except factory farm | 25.4 | 28.3 | 11.4 | 1,610 | 290 |
| Other Operatives, except Transport | | | | | |
| Asbestos, insulation workers | 27.0 | 33.2 | 23.0 | 1,020 | 620 |
| Assemblers | 944.0 | 1,068.0 | 13.1 | 47,000 | 12,400 |
| Blasters and powdermen | 7.1 | 7.2 | 1.4 | 150 | 10 |
| Bottling, canning operatives | 60.0 | 64.8 | 8.0 | 2,470 | 480 |
| Chainmen, rodmen, axmen surveying | 11.0 | 12.5 | 13.6 | 290 | 150 |
| Clothing ironers and pressers | 200.0 | 173.0 | -13.5 | 6,530 | -2,700 |
| Cutting operatives, n.e.c. | 239.0 | 288.1 | 20.5 | 12,580 | 4,910 |
| Dressmaker, seamstress, except factory | 110.0 | 106.6 | -3.1 | 7,720 | -340 |
| Drillers, earth | 57.8 | 56.5 | -1.7 | 960 | -110 |
| Dry wall installers, lathes | 47.0 | 68.7 | 46.2 | 2,670 | 2,170 |
| Dryers | 28.0 | 34.0 | 21.4 | [illegible] | 600 |
| Filer, polisher, sander, buffer | 126.0 | 125.1 | -0.7 | 3,420 | -90 |
| Garage workers, gas station attendants | 499.0 | 575.0 | 15.7 | 15,760 | 7,600 |

# TABLE 3
# NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80 | | |
|---|---|---|---|---|---|---|
| | | | | Total | Employment Change | Replacement Needs |
| operatives | 76.0 | 87.8 | 15.5 | 3,250 | 1,180 | 2,070 |
| , smeltermen, pourers | 74.4 | 84.9 | 14.1 | 2,510 | 1,050 | 1,460 |
| chine operatives | 145.0 | 180.9 | 24.8 | 6,950 | 3,590 | 3,360 |
| l | 7.5 | 6.8 | -9.3 | 80 | -70 | 150 |
| ng machine operatives | 155.0 | 181.8 | 17.3 | 5,910 | 2,680 | 3,230 |
| | 36.0 | 43.5 | 20.8 | 1,490 | 750 | 740 |
| ion machine operatives | 76.5 | 100.2 | 31.0 | 4,160 | 2,370 | 1,790 |
| ing press operatives | 180.0 | 214.0 | 18.9 | 8,600 | 3,400 | 5,200 |
| | 42.4 | 29.4 | -30.7 | 410 | -1,300 | 1,710 |
| flame cutters | 538.0 | 688.7 | 28.0 | 25,430 | 15,070 | 10,360 |
| ile | | | | | | |
| ping, combing | 17.8 | 11.8 | -33.7 | -140 | -600 | 460 |
| pers and toppers | 34.6 | 29.6 | -14.5 | 900 | -500 | 1,400 |
| isters, winders | 150.0 | 147.3 | -1.8 | 6,050 | -270 | 6,320 |
| | 46.0 | 38.3 | -16.7 | 930 | -770 | 1,700 |
| operatives | 190.0 | 177.9 | -6.4 | 5,690 | -1,210 | 6,900 |
| king, inspecting | | | | | | |
| aminers, etc., manufacturing | 690.0 | 811.1 | 17.6 | 38,600 | 12,110 | 26,490 |
| orters, manufacturing | 45.3 | 50.9 | 12.4 | 35,300 | 560 | 34,740 |
| s, retail trade | 46.5 | 60.3 | 29.7 | 3,840 | 1,380 | 2,460 |
| ppers, except meat, produce | 649.0 | 751.9 | 15.9 | 39,010 | 10,290 | 28,720 |
| ers, packers, except factory farm | 25.4 | 28.3 | 11.4 | 1,610 | 290 | 1,320 |
| xcept Transport | | | | | | |
| tion workers | 27.0 | 33.2 | 23.0 | 1,020 | 620 | 400 |
| | 944.0 | 1,068.0 | 13.1 | 47,000 | 12,400 | 34,600 |
| dermen | 7.1 | 7.2 | 1.4 | 150 | 10 | 140 |
| operatives | 60.0 | 64.8 | 8.0 | 2,470 | 480 | 1,990 |
| n, axmen surveying | 11.0 | 12.5 | 13.6 | 290 | 150 | 140 |
| and pressers | 200.0 | 173.0 | -13.5 | 6,530 | -2,700 | 9,230 |
| s, n.e.c. | 239.0 | 288.1 | 20.5 | 12,580 | 4,910 | 7,670 |
| mstress, except factory | 110.0 | 106.6 | -3.1 | 7,720 | -340 | 8,060 |
| | 57.8 | 56.5 | -1.7 | 960 | -110 | 1,07 |
| rs, lathes | 47.0 | 68.7 | 46.2 | 2,670 | 2,170 | 50 |
| | 28.0 | 34.0 | 21.4 | 1,2[illegible] | 600 | 62 |
| ander, buffer | 126.0 | 125.1 | -0.7 | 3,420 | -90 | 3,51 |
| gas station attendants | 499.0 | 575.0 | 15.7 | 15,760 | 7,600 | 8.16 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average 1970-8 Total | Employm Chang |
|---|---|---|---|---|---|
| Laundry, dry cleaning operatives, n.e.c. | 190.0 | 214.6 | 12.9 | 12,700 | 2,460 |
| Meat cutters, butchers, except manufacturing | 202.0 | 200.0 | -1.0 | 4,860 | -200 |
| Meat cutters, butchers | 88.0 | 91.9 | 4.4 | 2,800 | 390 |
| Milleners | 2.0 | 1.3 | -35.0 | 50 | -70 |
| Mine operatives, n.e.c. | 165.0 | 133.2 | -19.3 | -820 | -3,180 |
| Mixing operatives | 80.7 | 89.6 | 11.0 | 2,340 | 890 |
| Oilers, greasers, except automobile | 51.0 | 49.0 | -3.9 | 930 | -200 |
| Painters, manufacturing articles | 178.0 | 190.0 | 6.7 | 5,040 | 1,200 |
| Photographic process workers | 69.0 | 97.8 | 41.7 | 8,070 | 2,150 |
| Riveters and fasteners | 29.0 | 32.4 | 11.7 | 1,320 | 340 |
| Sailors and deckhands | 35.0 | 29.0 | -17.1 | -50 | -600 |
| Sawyers | 120.0 | 143.8 | 19.8 | 5,620 | 2,380 |
| Sewers and stitchers | 926.0 | 1,044.8 | 12.8 | 69,620 | 11,880 |
| Shoemaking machine operatives | 67.0 | 45.5 | -32.1 | 400 | -2,150 |
| Stationary firemen | 94.0 | 90.0 | -4.3 | 2,370 | -400 |
| Winding operatives, n.e.c. | 69.0 | 89.4 | 29.6 | 4,880 | 2,040 |
| Miscellaneous machine operatives | 1,307.0 | 1,500.0 | 14.8 | 57,610 | 19,300 |
| Operatives, n.e.c. | 1,131.4 | 1,176.4 | 4.0 | 38,190 | 4,500 |
| Transport Equipment Operatives | | | | | |
| Boatmen and canalmen | 6.0 | 5.7 | -5.0 | 120 | -30 |
| Bus drivers | 229.0 | 297.2 | 29.8 | 15,030 | 6,820 |
| Conductors, motormen, urban rail | 8.4 | 9.5 | 13.1 | 270 | 110 |
| Deliverymen and routemen | 817.0 | 965.0 | 18.1 | 29,690 | 14,800 |
| Fork lift, tow motor operatives | 281.0 | 340.0 | 21.0 | 9,780 | 5,900 |
| Motormen, mine, factory, logging | 10.0 | 9.5 | -5.0 | 130 | -50 |
| Parking attendants | 30.5 | 37.5 | 23.0 | 3,900 | 700 |
| Railroad brakemen | 49.0 | 42.4 | -13.5 | 130 | -660 |
| Railroad switchmen | 53.0 | 48.2 | -9.1 | 420 | -480 |
| Taxicab drivers, chauffeurs | 150.0 | 146.4 | -2.4 | 4,530 | -360 |
| Truck drivers | 1,378.0 | 1,581.2 | 14.7 | 43,250 | 20,320 |
| **Service Workers** | | | | | |
| Cleaning Service Workers | | | | | |
| Chambermaid, maid, except private | 218.5 | 285.7 | 30.8 | 38,130 | 6,720 |
| Cleaners and charwomen | 611.0 | 735.0 | 20.3 | 46,920 | 12,400 |
| Janitors and sextons | 1,163.0 | 1,600.0 | 37.6 | 103,240 | 43,700 |
| Food Service Workers | | | | | |
| Bartenders | 189.0 | 221.5 | 17.2 | 10,600 | 3,250 |

# TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

|  | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80 |  |  |
|---|---|---|---|---|---|---|
|  |  |  |  | Total | Employment Change | Replacement Needs |
| leaning operatives, n.e.c. | 190.0 | 214.6 | 12.9 | 12,700 | 2,460 | 10,240 |
| utchers, except manufacturing | 202.0 | 200.0 | -1.0 | 4,860 | -200 | 5,060 |
| utchers | 88.0 | 91.9 | 4.4 | 2,800 | 390 | 2,410 |
|  | 2.0 | 1.3 | -35.0 | 50 | -70 | 120 |
| , n.e.c. | 165.0 | 133.2 | -19.3 | -820 | -3,180 | 2,360 |
| es | 80.7 | 89.6 | 11.0 | 2,340 | 890 | 1,450 |
| , except automobile | 51.0 | 49.0 | -3.9 | 930 | -200 | 1,130 |
| facturing articles | 178.0 | 190.0 | 6.7 | 5,040 | 1,200 | 3,840 |
| ocess workers | 69.0 | 97.8 | 41.7 | 8,070 | 2,150 | 3,190 |
| steners | 29.0 | 32.4 | 11.7 | 1,320 | 340 | 980 |
| khands | 35.0 | 29.0 | -17.1 | -50 | -600 | 550 |
|  | 120.0 | 143.8 | 19.8 | 5,620 | 2,380 | 3,240 |
| chers | 926.0 | 1,044.8 | 12.8 | 69,620 | 11,880 | 57,740 |
| hine operatives | 67.0 | 45.5 | -32.1 | 400 | -2,150 | 2,550 |
| en | 94.0 | 90.0 | -4.3 | 2,370 | -400 | 2,770 |
| ves, n.e.c. | 69.0 | 89.4 | 29.6 | 4,880 | 2,040 | 2,340 |
| achine operatives | 1,307.0 | 1,500.0 | 14.8 | 57,610 | 19,300 | 38,310 |
| c. | 1,131.4 | 1,176.4 | 4.0 | 38,190 | 4,500 | 33,690 |
| nt Operatives |  |  |  |  |  |  |
| nalmen | 6.0 | 5.7 | -5.0 | 120 | -30 | 150 |
|  | 229.0 | 297.2 | 29.8 | 15,030 | 6,820 | 8,210 |
| ormen, urban rail | 8.4 | 9.5 | 13.1 | 270 | 110 | 160 |
| routemen | 817.0 | 965.0 | 18.1 | 29,690 | 14,800 | 14,790 |
| otor operatives | 281.0 | 340.0 | 21.0 | 9,780 | 5,900 | 3,880 |
| factory, logging | 10.0 | 9.5 | -5.0 | 130 | -50 | 180 |
| ts | 30.5 | 37.5 | 23.0 | 3,900 | 700 | 3,200 |
| en | 49.0 | 42.4 | -13.5 | 130 | -660 | 790 |
| men | 53.0 | 48.2 | -9.1 | 420 | -480 | 900 |
| chauffeurs | 150.0 | 146.4 | -2.4 | 4,530 | -360 | 4,890 |
|  | 1,378.0 | 1,581.2 | 14.7 | 43,250 | 20,320 | 22,930 |
| orke |  |  |  |  |  |  |
| id, except private | 218.5 | 285.7 | 30.8 | 38,130 | 6,720 | 31,410 |
| rwomen | 611.0 | 735.0 | 20.3 | 46,920 | 12,400 | 34,520 |
| ons | 1,163.0 | 1,600.0 | 37.6 | 103,240 | 43,700 | 59,540 |
| rs |  |  |  |  |  |  |
|  | 189.0 | 221.5 | 17.2 | 10,600 | 3,250 | 7,350 |

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| Occupation | 1970 Employment | 1980 Employment | Percent Change | Annual Average 1970-8<br>Total | <br>Employme Chang |
|---|---|---|---|---|---|
| Busboys | 110.0 | 115.7 | 5.2 | 2,300 | 570 |
| Cooks, except private | 821.0 | 950.0 | 15.7 | 53,190 | 12,900 |
| Dishwashers | 207.0 | 252.8 | 22.1 | 12,860 | 4,580 |
| Food counter, fountain workers | 282.0 | 264.1 | -6.3 | 13,340 | -1,790 |
| Waiters | 1,096.0 | 1,288.4 | 17.6 | 89,810 | 19,240 |
| Food workers, n.e.c., except private | 389.0 | 483.4 | 24.3 | 32,510 | 9,440 |
| **Health Service Workers** | | | | | |
| Dental assistants | 100.0 | 145.0 | 45.0 | 13,860 | 4,500 |
| Health aides, except nursing | 133.0 | 249.4 | 87.5 | 23,190 | 11,640 |
| Health trainees | 19.0 | 5.5 | -71.1 | -110 | -1,350 |
| Lay midwives | 0.8 | 1.1 | 37.5 | 80 | 30 |
| Nurses aides, orderlies | 834.0 | 1,203.4 | 44.3 | 96,020 | 36,940 |
| Practical nurses | 370.0 | 640.9 | 73.2 | 59,900 | 27,090 |
| **Personal Service Workers** | | | | | |
| Airline stewardesses | 34.2 | 59.7 | 74.6 | 7,220 | 2,550 |
| Attendant, recreation, amusement | 80.0 | 102.8 | 28.5 | 5,630 | 2,280 |
| Attendant, personal service, n.e.c. | 62.0 | 65.8 | 6.1 | 4,460 | 380 |
| Baggage porters and bellhops | 21.0 | 14.3 | -31.9 | -210 | -670 |
| Barbers | 158.0 | 150.0 | -5.1 | 5,710 | -800 |
| Boarding, lodging housekeepers | 9.6 | 2.9 | -69.8 | -160 | -670 |
| Bootblacks | 3.2 | 1.5 | -53.1 | -30 | -170 |
| Child care workers, except private | 339.0 | 482.9 | 42.4 | 42,460 | 14,390 |
| Elevator operators | 39.0 | 20.2 | -48.2 | -100 | -1,880 |
| Hairdressers, cosmetologists | 480.0 | 600.0 | 25.0 | 48,070 | 12,000 |
| Housekeepers, except private | 111.0 | 160.8 | 44.9 | 12,770 | 4,980 |
| Personal service apprentices | 1.0 | 0.5 | -50.0 | -20 | -50 |
| School monitors | 26.5 | 40.0 | 50.9 | 2,610 | 1,350 |
| Ushers, recreation, amusement | 16.3 | 18.0 | 10.4 | 700 | 170 |
| Welfare service aides | 18.0 | 36.8 | 104.4 | 3,180 | 1,880 |
| **Protective Service Workers** | | | | | |
| Crossing guards, bridgetenders | 46.0 | 52.0 | 13.0 | 4,010 | 600 |
| Firemen, fire protection | 181.0 | 258.4 | 42.8 | 10,310 | 7,740 |
| Guards and watchmen | 386.0 | 470.0 | 21.8 | 30,180 | 8,400 |
| Marshalls and constables | 5.9 | 8.0 | 35.6 | 530 | 210 |
| Policemen and detectives | 388.0 | 520.0 | 34.0 | 19,100 | 13,200 |
| Sheriffs and bailiffs | 40.0 | 54.0 | 35.0 | 2,850 | 1,400 |

243
244

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80 | | |
|---|---|---|---|---|---|---|
| | | | | Total | Employment Change | Replacement Needs |
| | 110.0 | 115.7 | 5.2 | 2,300 | 570 | 1,730 |
| private | 821.0 | 950.0 | 15.7 | 53,190 | 12,900 | 40,290 |
| | 207.0 | 252.8 | 22.1 | 12,860 | 4,580 | 8,280 |
| ountain workers | 282.0 | 264.1 | -6.3 | 13,340 | -1,790 | 15,130 |
| | 1,096.0 | 1,288.4 | 17.6 | 89,810 | 19,240 | 70,570 |
| n.e.c., except private | 389.0 | 483.4 | 24.3 | 32,510 | 9,440 | 23,070 |
| kers | | | | | | |
| ts | 100.0 | 145.0 | 45.0 | 13,860 | 4,500 | 9,360 |
| xcept nursing | 133.0 | 249.4 | 87.5 | 23,190 | 11,640 | 11,550 |
| | 19.0 | 5.5 | -71.1 | -110 | -1,350 | 1,240 |
| | 0.8 | 1.1 | 37.5 | 80 | 30 | 50 |
| rderlies | 834.0 | 1,203.4 | 44.3 | 96,020 | 36,940 | 59,080 |
| s | 370.0 | 640.9 | 73.2 | 59,900 | 27,090 | 32,810 |
| orkers | | | | | | |
| esses | 34.2 | 59.7 | 74.6 | 7,220 | 2,550 | 4,670 |
| ation, amusement | 80.0 | 102.8 | 28.5 | 5,630 | 2,280 | 3,350 |
| onal service, n.e.c. | 62.0 | 65.8 | 6.1 | 4,460 | 380 | 4,080 |
| and bellhops | 21.0 | 14.3 | -31.9 | -210 | -670 | 460 |
| | 158.0 | 150.0 | -5.1 | 5,710 | -800 | 6,510 |
| g housekeepers | 9.6 | 2.9 | -69.8 | -160 | -670 | 510 |
| | 3.2 | 1.5 | -53.1 | -30 | -170 | 140 |
| ers, except private | 339.0 | 482.9 | 42.4 | 42,460 | 14,390 | 28,070 |
| rs | 39.0 | 20.2 | -48.2 | -100 | -1,880 | 1,780 |
| smetologists | 480.0 | 600.0 | 25.0 | 48,070 | 12,000 | 36,070 |
| xcept private | 111.0 | 160.8 | 44.9 | 12,770 | 4,980 | 7,790 |
| apprentices | 1.0 | 0.5 | -50.0 | -20 | -50 | 30 |
| | 26.5 | 40.0 | 50.9 | 2,610 | 1,350 | 1,260 |
| on, amusement | 16.3 | 18.0 | 10.4 | 700 | 170 | 530 |
| aides | 18.0 | 36.8 | 104.4 | 3,180 | 1,880 | 1,300 |
| Workers | | | | | | |
| bridgetenders | 46.0 | 52.0 | 13.0 | 4,010 | 600 | 3,410 |
| tection | 181.0 | 258.4 | 42.8 | 10,310 | 7,740 | 2,570 |
| hmen | 386.0 | 470.0 | 21.8 | 30,180 | 8,400 | 21,780 |
| nstables | 5.9 | 8.0 | 35.6 | 53[illegible] | 210 | 320 |
| etectives | 388.0 | 520.0 | 34.0 | 19,100 | 13,200 | 5,900 |
| iffs | 40.0 | 54.0 | 35.0 | 2,850 | 1,400 | 1,450 |

# TABLE 3
# NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

| | | | | Annual Average 1970-80 | |
|---|---|---|---|---|---|
| Occupation | 1970 Employment | 1980 Employment | Percent Change | Total | Employme Change |
| Private Household Workers | | | | | |
| Child care workers | 517.0 | 432.0 | -16.4 | 30,400 | -8,500 |
| Cooks, private | 36.0 | 32.0 | -11.1 | 2,320 | -400 |
| Housekeepers, private | 107.0 | 92.0 | -14.0 | 6,230 | -1,500 |
| Laundresses, private | 12.0 | 8.0 | -33.3 | 8,260 | -400 |
| Maids, servants, private | 696.0 | 575.7 | -17.3 | 33,120 | -12,030 |
| **Laborers, except Farm** | | | | | |
| Animal Caretaker, except Farm | 71.0 | 71.7 | 1.0 | 2,790 | 70 |
| Carpenters, Helpers | 117.0 | 80.6 | -31.1 | -1,970 | -3,640 |
| Construction Laborers, except Carpenter Helpers | 805.0 | 855.6 | 6.3 | 2,034 | 5,060 |
| Fishermen and Oystermen | 34.0 | 27.8 | -18.2 | 190 | -620 |
| Freight, Material Handlers | 748.0 | 846.7 | 13.2 | 23,740 | 9,870 |
| Garbage Collectors | 84.0 | 139.1 | 65.6 | 7,570 | 5,510 |
| Gardeners, Groundkeepers, except Farm | 537.0 | 550.4 | 2.5 | 23,200 | 1,340 |
| Longshoremen and Stevedores | 56.0 | 55.5 | -0.9 | 1,170 | -50 |
| Lumbermen, Raftsmen, Woodchoppers | 82.0 | 68.9 | -16.0 | 20 | -1,310 |
| Stock Handlers | 718.0 | 870.3 | 21.2 | 29,360 | 15,230 |
| Teamsters | 7.0 | 3.9 | -44.3 | -200 | -310 |
| Vehicle Washers, Equipment Cleaners | 176.0 | 200.1 | 13.7 | 6,130 | 2,410 |
| Warehousemen, n.e.c. | 149.0 | 149.6 | 0.4 | 2,600 | 60 |
| Other Laborers | 591.0 | 579.8 | -1.9 | 14,160 | -1,120 |
| **Farmers and Farm Workers** | | | | | |
| Farmers and Farm Managers | | | | | |
| Farmers (owners and tentants) | 1,690.0 | 1,073.4 | -36.5 | 6,600 | -61,660 |
| Farm managers | 33.0 | 44.9 | 36.1 | 2,520 | 1,190 |
| Farm Laborers, Farm Foremen | | | | | |
| Farm foremen | 31.0 | 26.5 | -14.5 | 410 | -450 |
| Farm laborers, wage workers | 897.0 | 535.7 | -40.3 | -13,060 | -36,130 |
| Farm laborers, unpaid family | 474.0 | 315.6 | -33.4 | -1,980 | -15,840 |
| Farm laborers, self-employed | 4.0 | 3.9 | -2.5 | 120 | -10 |

SOURCE: Bureau of Labor Statistics

## TABLE 3
## NATIONAL 1970 EMPLOYMENT, PROJECTED 1980 REQUIREMENTS AND ANNUAL AVERAGE OPENINGS 1970-1980 BY OCCUPATION - continued

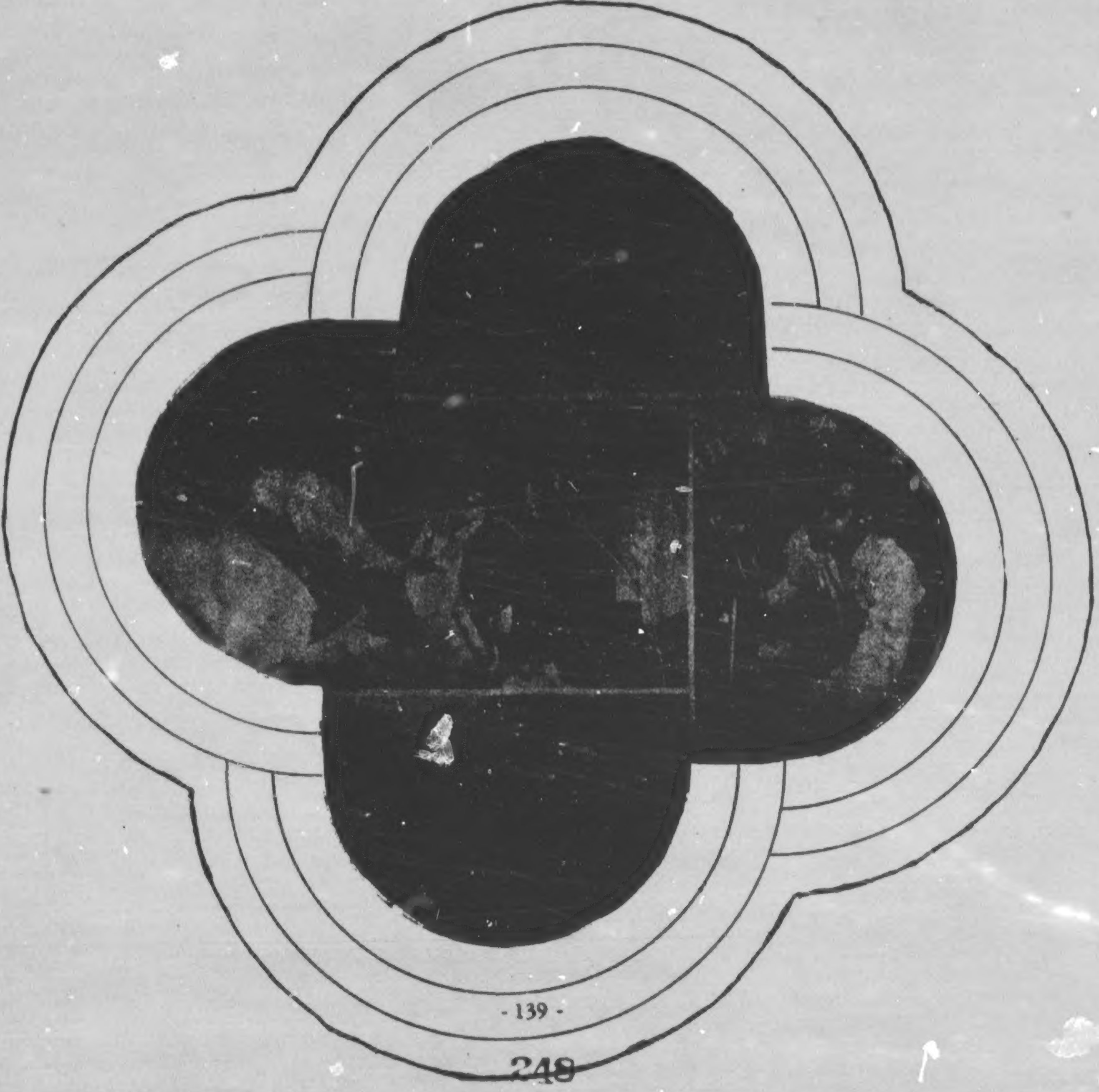
| | 1970 Employment | 1980 Employment | Percent Change | Annual Average Openings 1970-80 Total | Employment Change | Replacement Needs |
|---|---|---|---|---|---|---|
| orkers | | | | | | |
| rs | 517.0 | 432.0 | -16.4 | 30,400 | -8,500 | 38,900 |
| | 36.0 | 32.0 | -11.1 | 2,320 | -400 | 2,720 |
| ivate | 107.0 | 92.0 | -14.0 | 6,230 | -1,500 | 7,730 |
| vate | 12.0 | 8.0 | -33.3 | 8,260 | -400 | 8,660 |
| private | 696.0 | 575.7 | -17.3 | 33,120 | -12,030 | 45,150 |
| | | | | | | |
| cept Farm | 71.0 | 71.7 | 1.0 | 2,790 | 70 | 2,720 |
| | 117.0 | 80.6 | -31.1 | -1,970 | -3,640 | 1,670 |
| rs, except Carpenter Helpers | 805.0 | 855.6 | 6.3 | 2,034 | 5,060 | 15,280 |
| rmen | 34.0 | 27.8 | -18.2 | 190 | -620 | 810 |
| ndlers | 748.0 | 846.7 | 13.2 | 23,740 | 9,870 | 13,870 |
| | 84.0 | 139.1 | 65.6 | 7,570 | 5,510 | 2,060 |
| epers, except Farm | 537.0 | 550.4 | 2.5 | 23,200 | 1,340 | 21,860 |
| tevedores | 56.0 | 55.5 | -0.9 | 1,170 | -50 | 1,220 |
| n, Woodchoppers | 82.0 | 68.9 | -16.0 | 20 | -1,310 | 1,330 |
| | 718.0 | 870.3 | 21.2 | 29,360 | 15,230 | 14,130 |
| | 7.0 | 3.9 | -44.3 | -200 | -310 | 110 |
| uipment Cleaners | 176.0 | 200.1 | 13.7 | 6,130 | 2,410 | 3,720 |
| | 149.0 | 149.6 | 0.4 | 2,600 | 60 | 2,540 |
| | 591.0 | 579.8 | -1.9 | 14,160 | -1,120 | 15,280 |
| | | | | | | |
| rs | | | | | | |
| nagers | | | | | | |
| nd tentants) | 1,690.0 | 1,073.4 | -36.5 | 6,600 | -61,660 | 68,260 |
| | 33.0 | 44.9 | 36.1 | 2,520 | 1,190 | 1,330 |
| Foremen | | | | | | |
| | 31.0 | 26.5 | -14.5 | 410 | -450 | 860 |
| ge workers | 897.0 | 535.7 | -40.3 | -13,060 | -36,130 | 23,070 |
| aid family | 474.0 | 315.6 | -33.4 | -1,980 | -15,840 | 13,860 |
| f-employed | 4.0 | 3.9 | -2.5 | 120 | -10 | 130 |

bor Statistics

## APPENDIX C

Reprint of "Occupational Outlook Handbook in Brief, 1974-75 Edition" from the Summer 1974 edition of Occupational Outlook Quarterly.

# Occupational Outlook Handbook In Brief 1974-75 Edition



*More than 60 million jobs will open up between 1972 and 1985. Here is a capsule view of where the opportunities will be.*

by Joan Slowitsky*

The choice of a career is an important decision. A young person's interests, values, and aptitudes must be blended into a job market that is becoming increasingly complex and uncertain. Uncertainty cannot be eliminated, of course, but it can be reduced. That's why the 1974–75 edition of the *Occupational Outlook Handbook* can be a valuable aid to the young job seeker. It describes in detail many of the important criteria in picking a career—nature of the work, training requirements, earnings, working conditions, places of employment, and employment outlook. The "Occupational Outlook Handbook in Brief" is a summary of one important aspect of job evaluation—the employment outlook.

**The Economy in 1985.** The Bureau of Labor Statistics estimates that around 101.5 million workers will be employed in hundreds of different occupations by 1985, a 24 percent increase over 1972. While employment prospects will be as varied as the jobs themselves, definite overall patterns of opportunity will emerge. White-collar occupations—including professional, technical, managerial, clerical, and sales—in general will grow the fastest. Throughout recent years, white-collar workers have continuously increased their proportion of total employment. This trend is expected to continue, although growth will not be as rapid as it was during the 1960's.

Employment of craft workers, operatives, and nonfarm laborers, commonly known as blue-collar workers, is expected to increase through the mid-1980's but at a much slower rate than that of white-collar workers. Employment in the service occupations, which include a variety of diverse jobs such as FBI agent, police officer, beauty operator, and janitor, is expected to increase slightly faster than that of blue-collar workers. The number of farm laborers is expected to decline by nearly one-half.

The overall 1985 employment picture and the individual occupational projections developed by the Bureau of Labor Statistics are based on a set of assumptions about the status of the country in the mid-1980's. The assumptions are that

—High levels of employment and manpower utilization will prevail in the mid-1980's,

—No major events such as energy shortages that are of long duration or are widespread will alter substantially the rate of economic growth. Although energy shortages were being experienced as the *Handbook* went to press, no conclusive assessments could be made of the magnitude nor duration of the shortages nor their long-run effect on employment as a factor either stimulating or restricting employment opportunities in specific industries or occupations. Future editions of the *Handbook* and the *Occupational Outlook Quarterly* will incorporate the significant findings of special studies and reports in this area,

—Economic, social, and educational trends will continue according to recent patterns,

—Scientific and technological advances will continue at about the same rate as they have in recent years, and

—The United States will not be engaged in a war, but that there will be no substantial cutbacks in the defense budget from its present level.

**Employment Prospects.** Many of the statements on employment outlook in the "Occupational Outlook Handbook in Brief" are explained in terms of total employment growth. To distinguish the degree of expansion or decline between one occupation and another, words describing growth are used—little or no change, slow, moderate, rapid, or very rapid increase or decrease. Between two occupations with approximately equal numbers of workers, the faster growing one will generally offer the better employment possibilities. However, a large occupation with a slow growth rate generally offers more openings than a smaller, faster growing occupation because there are more deaths and retirements. For example, projections indicate that the number of those employed as actuaries should increase by about 60 percent from 1972 to 1985—from 5,500 to 9,000. Estimated openings will be 500 each year—300 from growth and 200 from deaths and retirements. The number of telephone operators, on the other

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# Occupational Outlook Handbook In Brief

hand, is expected to increase by only 1 percent, to 232,000. However, many more annual openings will occur—15,800 for workers to replace those who die, retire, or leave the labor force for family or other reasons but only 200 from growth. For this occupation, the need for replacements is actually a much more important factor in the number of openings than growth. For the economy as a whole, about twice as many openings will result from replacements as from growth during the 1972–85 period. (See chart.)

The number of people who move from one occupation to another are not included in the figure for annual openings in each occupation. Such transfers, however, can account for a significant number of job openings so that the totals could be well above those presented in this article.

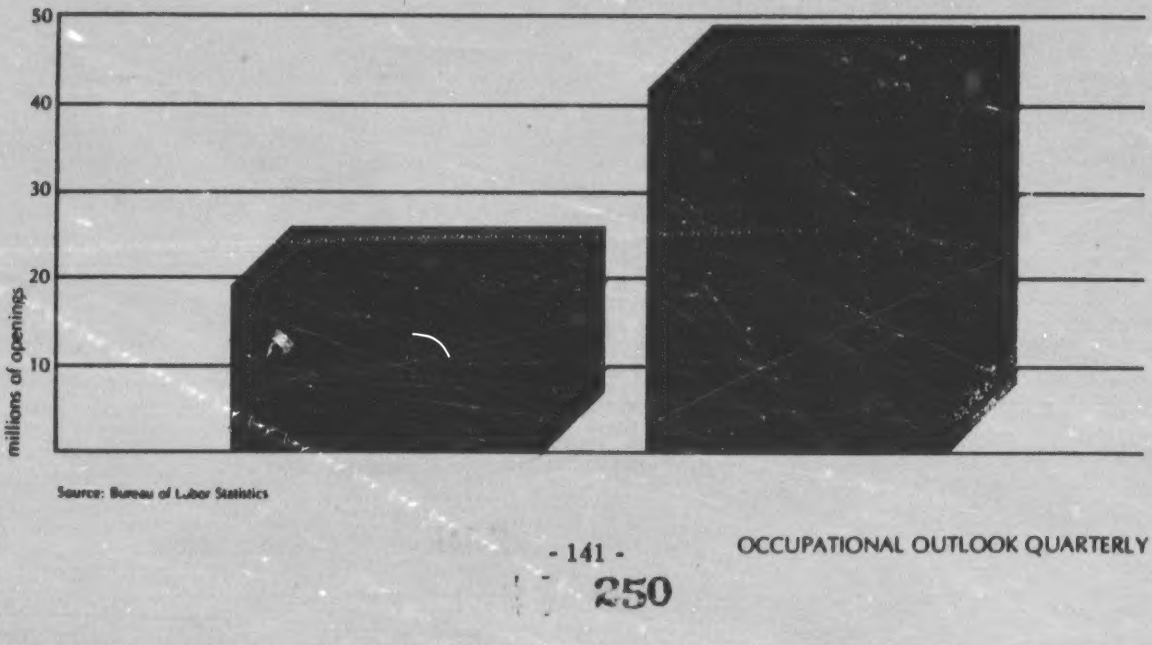
Whenever possible, another factor is described in the outlook analysis—the competitiveness for positions. This consideration usually is limited to those in the professional and technical fields, where some information can be gathered (1) about the number of qualified entrants to the field or (2) about those jobs where past trends would indicate a continual overabundance or shortage of applicants. If the statement indicates that there is an "excellent outlook," this generally means that there would be more positions than qualified applicants and entry into the field would be relatively easy, based on current trends in the work and study patterns of young people. "Keen competition" would reflect the opposite situation. For example, although thousands of openings will arise each year for teachers, trends in the number of persons taking training and entering this field of work indicate that, if these trends continue, competition for teaching positions will be very severe.

**Cluster Groupings.** The occupations in the brief are grouped by related jobs into 13 clusters. These groupings enable young people interested in a broad field to locate easily the employment prospects for a large number of related specific occupations. For example, a young person interested in a health career can find information about 35 occupations in this field having different educational and training requirements.

The brief, however, does not contain information about some major industries, such as restaurants and the atomic energy field. Material about such industries can be found in the *Occupational Outlook Handbook*.

**The Handbook.** The 1974–75 edition of the *Occupational Outlook Handbook* includes information about 850 occupations and more than 30 industries. Copies of the *Handbook* usually are available in school counselors' offices and in school and public libraries. The volume may also be purchased for $6.85 a copy from regional offices of the Bureau of Labor Statistics, listed on the inside front cover of this issue.

DEATH AND RETIREMENTS WILL ACCOUNT FOR TWICE AS MANY OPENINGS AS GROWTH BETWEEN 1972 TO 1985



Source: Bureau of Labor Statistics

# OCCUPATIONAL OUTLOOK HANDBOOK IN BRIEF
## 1974–75 Edition*

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **INDUSTRIAL PRODUCTION AND RELATED OCCUPATIONS** | | | |
| **Foundry Occupations** | | | |
| **Coremen** | 23,000 | 450 | Little or no change in employment due to the growing use of machine-made cores. |
| **Molders** | 56,000 | 1,100 | Trend toward greater use of machine molding and permanent and shell molds will limit growth. |
| **Patternmakers** | 19,000 | 450 | Relatively stable employment due to greater use of reusable metal patterns. Most of the relatively small number of openings from death and retirements will be for metal patternmakers. |
| **Machining Occupations** | | | |
| **All-Round Machinists** | 320,000 | 13,100 | Moderate employment growth due to rising demand for machined goods such as automobiles, household appliances, and industrial products. |
| **Instrument Makers (Mechanical)** | 5,000 | 200 | Moderate employment growth due to the growing use of instruments in manufacturing processes and in research and development work. |
| **Machine Tool Operators** | 546,000 | 25,600 | Moderate employment increase due to expansion of metal-working activities. |
| **Setup Men (Machine Tools)** | 43,000 | 2,200 | Rapid employment growth due to increasing consumer and industrial demand for machined goods. |
| **Tool-and-Die Makers** | 172,000 | 4,200 | Slow employment growth. Most openings will occur as workers retire, die, or transfer to other fields of work. |
| **Printing Occupations** | | | |
| **Bookbinders and Related Workers** | 32,000 | 550 | Moderate employment increase. |
| **Composing Room Occupations** | 170,000 | 4,300 | Slowly declining employment due to more efficient typesetting equipment. A few thousand openings are expected yearly to replace workers who retire or die. |
| **Electrotypers and Stereotypers** | 7,000 | 100 | Slow employment decline resulting from greater use of lithographic (offset) printing and other laborsaving techniques. Some openings will result from retirements and deaths. |

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*The occupational titles used here are those contained in the *Occupational Outlook Handbook*, which went to press before the Bureau of the Census' occupational classification system was changed to remove titles that denote or connotate sex stereotypes.

**See footnotes at end of table.**

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Lithographic Occupations** | 81,000 | 5,100 | Very rapid employment increase as a result of the greater use of lithographic (offset) printing. |
| **Photoengravers** | 16,000 | 200 | Slowly declining employment as a result of improved photographic equipment and the increasing use of lithographic (offset) printing which requires no photoengraving. Some openings will stem from the need to replace workers who die or retire. |
| **Printing Pressmen** | 142,000 | 6,100 | Slow employment growth due to the use of faster and more efficient presses. |
| **Other Industrial and Related Occupations** | | | |
| **Assemblers** | 1,017,000 | 40,500 | Slow employment growth, but thousands of openings will occur each year from deaths and retirements in this large field. |
| **Automobile Painters** | 25,000 | 800 | Moderate employment increase because of the growing number of automobiles damaged in traffic accidents. |
| **Blacksmiths** | 10,000 | 350 | Mass-production of metal parts previously made by blacksmiths should reduce employment. Some openings from deaths and retirements. |
| **Boilermaking Occupations** | 33,000 | 1,300 | Moderate employment increase due to expansion of industries that use boilers. |
| **Electroplaters** | 17,000 | 900 | Moderate employment increase because of expanding use of electroplating and the growth of the metalworking industries. |
| **Foremen** | 1,400,000 | 58,000 | Moderate employment growth resulting from industrial expansion and the need for increased supervision as production processes become increasingly complex. |
| **Furniture Upholsterers** | 35,000 | 1,400 | Slow employment growth because of the use of durable fabrics and the trend toward buying new furniture instead of reupholstering the old. |
| **Inspectors (Manufacturing)** | 725,000 | 44,700 | Moderate employment increase due to industrial expansion and the growing complexity of manufactured goods. |
| **Millwrights** | 83,000 | 3,300 | Moderate employment increase as a result of the construction of new plants, changes in plant layouts, and the increasing amount of complex machinery. |
| **Motion Picture Projectionists** | 16,000 | 1,000 | Slow employment growth. Most openings will occur as workers retire, die, or transfer to other fields of work. |
| **Photographic Laboratory Occupations** | 38,000 | 2,700 | Rapid employment increase resulting from growth of amateur photography and increasing use of photography in business and government. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Power Truck Operators** | 300,000 | 9,100 | Moderate employment growth due to industrial expansion. |
| **Production Painters** | 180,000 | 5,000 | Greater use of automatic sprayers and other laborsaving innovations should limit growth to a slow employment increase. |
| **Stationary Engineers** | 178,000 | 4,600 | Relatively stable employment because large boilers and automatic controls make possible increased capacity without corresponding increases in employment. However, there will be a few thousand openings yearly from deaths and retirements. |
| **Stationary Firemen** | 93,000 | 2,100 | Trend toward use of larger boilers and centralized equipment should result in a slow decrease in employment. However, many jobs will have to be filled yearly because of deaths and retirements. |
| **Wastewater Treatment Plant Operators (Sewage Plant Operators)** | 20,000 | 1,200 | Rapid employment growth as more treatment plants are constructed to process the increasing amount of domestic and industrial wastewater. |
| **Welders and Flamecutters** | 554,000 | 27,200 | Rapid employment increase due to growth of metalworking industries and wider use of welding. |
| **OFFICE OCCUPATIONS** | | | |
| **Clerical Occupations** | | | |
| **Bookkeeping Workers** | 1,584,000 | 118,000 | Limited employment growth because of increasing automation of recordkeeping. Most job openings will result from deaths and retirements. |
| **Cashiers** | 998,000 | 95,000 | Rapid growth in employment. Best prospects for persons with typing and bookkeeping skills. Favorable opportunities for part-time work. |
| **File Clerks** | 272,000 | 22,800 | Increased demand for adequate recordkeeping should result in many job openings. Limited growth due to the increasing use of computers to store and retrieve data. |
| **Hotel Front Office Clerks** | 49,000 | 4,800 | Rapid employment growth as the number of hotels, motels, and motor hotels increases. |
| **Office Machine Operators** | 195,000 | 13,700 | Despite expected growth in the volume of office work, employment growth should be slow due to the expansion of automated recordkeeping. |
| **Postal Clerks** | 286,000 | 10,500 | Slow employment growth with most openings resulting from deaths and retirements. |
| **Receptionists** | 436,000 | 55,100 | Very rapid employment growth due to the expansion of businesses employing receptionists. Because this work is of a personal nature, prospects should not be affected by office automation. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Shipping and Receiving Clerks** | 451,000 | 13,800 | Slow employment growth as laborsaving equipment enables clerks to handle a greater volume of merchandise. |
| **Statistical Clerks** | 299,000 | 23,000 | Moderate increase in employment as more numerical information is used by business and government organizations. The use of computers will eliminate some routine positions. |
| **Stenographers and Secretaries** | 3,074,000 | 411,000 | The increasing use of dictating machines will limit opportunities for office stenographers. Excellent prospects for secretaries and shorthand reporters. |
| **Stock Clerks** | 511,000 | 34,800 | Very rapid employment growth as manufacturing firms, wholesale establishments, and retail stores continue to expand. Some competition for jobs can be expected because many young people seek this work as a first job. |
| **Typists** | 1,021,000 | 115,700 | Rapid employment growth with good opportunities for competent typists, especially those familiar with automatic typewriters. |
| **Computer and Related Occupations** | | | |
| **Computer Operating Personnel** | 480,000 | 27,000 | Rapid rise in employment of console and auxiliary equipment operators as the number of computer installations increases. Declining demand for keypunch operators because of improved methods of data entry. |
| **Programmers** | 186,000 | 13,000 | Rapid employment growth as computers are increasingly used in business and government operations. Best opportunities for persons qualified in both programming and systems analysis. |
| **Systems Analysts** | 103,000 | 8,300 | Very rapid employment growth as requirements for data processing systems expand because of increased use of computers. |
| **Banking Occupations** | | | |
| **Bank Clerks** | 473,000 | 43,200 | Rapid employment growth as new and existing banks expand their services. Best prospects for data processing workers. |
| **Bank Officers** | 219,000 | 13,600 | Rapid employment gains as the number of banks increases and the services they offer expand. |
| **Bank Tellers** | 248,000 | 25,000 | Rapid employment growth as banks expand their services. Favorable opportunities for part-time work during peak business hours. |
| **Insurance Occupations** | | | |
| **Actuaries** | 5,500 | 500 | Favorable job opportunities for graduates with strong backgrounds in mathematics and statistics who have passed one or two actuarial examinations while still in school. The large number of graduates with degrees in mathematics and of students who have passed actuarial examinations, however, could result in competition for jobs. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| Claim Adjusters | [illegible] | [illegible] | Moderate employment increase due to expanding insurance sales and resulting claims. Declining opportunities for adjusters who specialize in automobile claims as more States adopt no-fault insurance plans; very good prospects for other types of adjusters. |
| Claim Examiners | 31,000 | 600 | Limited opportunities. Fewer examiners will be needed to process claims due to the increasing use of computers; also, fewer automobile claims will arise as more States adopt no-fault insurance plans. |
| Underwriters | 61,000 | 2,500 | Many opportunities as the demand for insurance protection increases. Best prospects for those with college training. |
| **Administrative and Related Occupations** | | | |
| Accountants | 714,000 | 41,900 | Good opportunities. Because of the growing complexity of business accounting requirements, accountants with college degrees will be in greater demand than those without degrees. |
| Advertising Workers | 152,000 | (3) | Employment should grow moderately due to greater emphasis businesses place on advertising. Although competition may be keen for entry jobs, applicants with good academic preparation should find many opportunities. |
| City Managers | 2,500 | 150 | Very rapid employment growth, but supply of qualified persons expected to grow faster. Those without a master's degree in public administration are likely to face the keenest competition for jobs. |
| College Student Personnel Workers | 35–40,000 | (3) | Current financial problems of colleges and universities may limit immediate growth. Over the short run, most openings will be due to replacement needs. |
| Credit Officials | 114,000 | 7,500 | Rapid employment growth as number of loans and volume of purchases on credit increase. |
| Hotel Managers and Assistants | 110,000 | 7,500 | Very good prospects especially for those who have degrees in hotel administration. |
| Industrial Traffic Managers | 20,300 | (3) | Slow employment increase. Best opportunities for those with college training. |
| Lawyers | 303,000 | 16,500 | Moderate employment rise due to the growth of legal action in such areas as consumer protection and the environment and the greater use of attorneys by low- and middle-income groups. Prospects for establishing a new practice probably will be best in small towns and growing suburban areas; most salaried positions will become available in urban areas. Keen competition for salaried positions. |
| Marketing Research Workers | 25,000 | (3) | Very rapid employment growth as existing marketing organizations expand and new ones are established. Best opportunities for those with advanced degrees. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Personnel Workers** | 240,000 | (3) | Excellent opportunities. Particularly good job prospects for persons trained in psychological testing and in handling work-related problems. Limited chances to enter field from clerical or subprofessional jobs. |
| **Public Relations Workers** | 87,000 | (3) | Moderate employment increase due to growth in importance of public relations. |
| **Purchasing Agents** | 181,000 | (3) | Moderate employment growth. Strongest demand for business administration graduates who have had courses in purchasing. Engineering and science graduates will be needed by firms manufacturing technical products. |
| **SERVICE OCCUPATIONS** | | | |
| **Cleaning and Related Occupations** | | | |
| **Building Custodians** | 1,885,000 | 136,000 | Moderate employment growth due to construction of apartment houses, motels, and other buildings that use custodial services. Maintenance needs of condominiums also will contribute to employment growth. |
| **Exterminators** | 25,000 | 1,300 | Rapid employment increase. Because pests reproduce rapidly and tend to develop immunity to pesticides, their control is a never-ending problem. |
| **Hotel Housekeepers and Assistants** | 17,000 | 1,700 | Rapid employment growth as the number of hotels increases. The best opportunities will be in new hotels and luxury motels. |
| **Food Service Occupations** | | | |
| **Bartenders** | 200,000 | 8,800 | Moderate employment increase as new restaurants, bars, and hotels open. |
| **Cooks and Chefs** | 866,000 | 52,000 | Moderate growth in employment. Most starting jobs will be in small restaurants and other eating places where food preparation is fairly simple. |
| **Meatcutters** | 200,000 | 4,400 | Although total employment is expected to show little or no change, thousands of openings will become available from deaths and retirements. |
| **Waiters and Waitresses** | 1,124,000 | 86,000 | Moderate employment increase due to the construction of new hotels and restaurants. Most openings, however, will stem from high turnover. |
| **Personal Service Occupations** | | | |
| **Barbers** | 157,000 | 5,000 | Little or no employment change with most openings resulting from deaths and retirements. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Bellmen and Bell Captains** | 16,000 | 600 | Little employment change. Although some openings will result as new hotels and motor hotels are built, the fast growing motel business, with its emphasis on informality, will continue to employ only a few bellmen. |
| **Cosmetologists** | 500,000 | 51,000 | Very good job opportunities for experienced workers and newcomers. Good prospects also for those seeking part-time work. |
| **Funeral Directors and Embalmers** | 45,000 | 1,300 | Little or no change in employment is expected. Prospects are nevertheless good, as replacement needs will create many openings. |
| **Private Household Service Occupations** | | | |
| **Private Household Workers** | 1,437,000 | 51,000 | Despite the expected employment decline, job opportunities will be very good. Many openings will result as persons discouraged by low wages seek employment in other fields. |
| **Protective and Related Service Occupations** | | | |
| **Construction Inspectors (Government)** | 23,000 | 1,500 | Rapid employment growth through the mid-1980's. Best outlook for those with experience in construction work and some college or vocational education related to engineering or construction. |
| **FBI Agents** | 8,600 | ([3]) | Rising employment as FBI responsibilities grow. Turnover rate traditionally low. |
| **Firefighters** | 200,000 | 11,600 | Rapid employment growth as fire departments enlarge their staffs and paid firefighters replace volunteers. Keen competition for jobs in large cities. |
| **Guards and Watchmen** | 250,000 | 19,300 | Moderate employment growth due to the mounting incidence of crime and the increasing numbers of plants, offices, and stores requiring protection. |
| **Health and Regulatory Inspectors (Government)** | 25,000 | 1,700 | Very rapid employment growth, particularly at the State government level, in response to pressures for consumer protection. |
| **Police Officers** | 370,000 | 14,300 | Increased demand for protective services should create very good employment opportunities; specialized training will become increasingly important. |
| **State Police Officers** | 44,000 | 2,300 | Very rapid employment growth. As population grows and becomes more mobile, the greatest need will be for officers in highway patrols. |
| **Other Service Occupations** | | | |
| **Postal Mail Carriers** | 263,000 | 7,900 | Slow employment growth. Most openings will arise as workers retire or die. |
| **Telephone Operators** | 230,000 | 16,000 | Although direct dialing and other automatic devices will restrict growth, there will be thousands of openings each year as operators retire, die, or leave the labor force for other reasons. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **EDUCATION AND RELATED OCCUPATIONS** | | | |
| **Teaching Occupations** | | | |
| **College and University Teachers** | **525,000** | **24,000** | Entrants may face keen competition through the mid-1980's. New doctoral and master's degree holders, the main source of supply, are expected to more than meet the expanding demand for college and university teachers. |
| **Kindergarten and Elementary School Teachers** | **1,274,000** | **105,000** | Competition is expected through the mid-1980's. If patterns of entry and reentry continue, the number of persons qualified to teach in elementary schools will exceed the number of openings. |
| **Secondary School Teachers** | **1,023,000** | **40,000** | If past trends of entry continue through the mid-1980's, the supply will greatly exceed anticipated requirements. Keen competition for prospective teachers, although a recent survey found teacher shortages in mathematics, industrial arts, special education, and some vocational-technical subjects. |
| **Library Occupations** | | | |
| **Librarians** | **120,000** | **11,200** | Favorable overall opportunities, but some librarians may have to compete for jobs of their choice. Best employment prospects in public and special libraries. |
| **Library Technical Assistants** | **25,000** | **(1)** | Good employment prospects particularly for graduates of academic programs. Especially favorable opportunities in large public and college and university libraries. |
| **SALES OCCUPATIONS** | | | |
| **Automobile Parts Countermen** | **72,000** | **3,400** | Rapid employment increase as result of the growing number of motor vehicles. |
| **Automobile Salesworkers** | **131,000** | **4,600** | Moderate employment growth as car sales increase. There may, however, be some fluctuations in employment from year to year. |
| **Automobile Service Advisers** | **21,000** | **900** | Rapid employment increase resulting from the increasing number of automobiles and their complexity. |
| **Gasoline Service Station Attendants** | **435,000** | **15,400** | The increasing demand for gasoline and other service station products is expected to cause employment to increase. However, job opportunities, especially for part-time work, may be adversely affected if fuel shortages continue. |
| **Insurance Agents and Brokers** | **385,000** | **16,000** | Moderate employment growth. Despite an expected increase in sales volume, selling is expected to remain keenly competitive. |
| **Manufacturers' Salesworkers** | **423,000** | **20,000** | Greater business competition should stimulate employment of manufacturers' salesworkers. Most favorable opportunities for those trained to sell technical products. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings | Employment trends and prospects |
|---|---|---|---|
| Models | 7,300 | (2) | Moderate employment increase, but competition for available jobs will be keen. |
| Real Estate Salesworkers and Brokers | 349,000 | 25,000 | Moderate employment increase to result from the growing demand for home purchases and rentals. Mature workers, including those transferring from other kinds of saleswork, are likely to find many job opportunities. |
| Retail Trade Salesworkers | 2,778,000 | 190,000 | Good employment opportunities for full- and part-time workers as income levels rise and stores continue to remain open longer. |
| Routemen | 190,000 | 3,700 | Although little change in overall employment is expected, many job openings will result from deaths and retirements. |
| Securities Salesworkers | 220,000 | 11,900 | Moderate employment growth as funds available for investment increase. Many openings will also result from deaths and retirements. Transfers of salesworkers who have left their jobs because they were unable to establish a successful clientele should also create many additional opportunities. |
| Wholesale Trade Salesworkers | 688,000 | 21,000 | Moderate employment growth resulting from expansion of wholesalers' customer services, the duties of salesworkers, and business in general. |
| **CONSTRUCTION OCCUPATIONS** | | | |
| Asbestos and Insulating Workers | 30,000 | 1,200 | Rapid employment growth due to greater construction activity. |
| Bricklayers | 180,000 | 6,600 | Moderate growth in employment as result of increasing construction activity and the growing use of ornamental brickwork. |
| Carpenters | 1,000,000 | 37,000 | Moderate employment growth from increased construction and greater demand for carpenters in the maintenance departments of factories, stores, and large apartment and government buildings. |
| Cement Masons (Cement and Concrete Finishers) | 75,000 | 4,100 | Very rapid growth in employment due to the anticipated growth in construction and the increasing use of concrete and concrete products. |
| Construction Laborers | 876,000 | 24,500 | Slow employment increase because of the widespread use of mechanized equipment. However, there will be many openings due to deaths and retirements. |
| Electricians (Construction) | 240,000 | 11,100 | Rapid employment increase as construction expands and more electric outlets, switches, and wiring are needed for appliances, air-conditioning systems, electronic data processing equipment, and electrical control devices. |
| Elevator Constructors | 17,000 | 1,000 | Very rapid employment growth as a result of the anticipated expansion in industrial, commercial, and large residential buildings and the modernization of older elevators. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Floor Covering Installers** | 75,000 | 3,200 | Rapid employment increase due to more widespread use of resilient floor coverings and carpeting. |
| **Glaziers** | 12,000 | 700 | Very rapid employment increase as more glass is used in new buildings. |
| **Lathers** | 30,000 | 1,100 | Rapid employement growth because of rising construction activity, increasing use of new kinds of plasters, and improved methods of applying plaster. |
| **Operating Engineers (Construction Machinery Operators)** | 435,000 | 18,500 | Rapid employment increase as more bulldozers, cranes, and other heavy machines are used in construction work. |
| **Painters and Paperhangers** | 420,000 | 14,700 | While most openings will be for painters, several hundred jobs for paperhangers are expected to become available yearly. |
| **Plasterers** | 30,000 | 900 | Slow employment growth. Most openings will occur as workers retire, die, or transfer to other fields of work. |
| **Plumbers and Pipefitters** | 400,000 | 16,300 | Moderate employment increase due to rising construction activity and growth of industries which use extensive pipework in their processing activities, such as chemical and petroleum refining. Also, the trends toward more bathrooms per home and more central air-conditioning will result in increased demand for these workers. |
| **Roofers** | 80,000 | 3,400 | Rapid employment increase due to the rise in construction activity. |
| **Sheet-Metal Workers** | 65,000 | 2,300 | Moderate employment rise as more workers are needed to install air-conditioning and heating ducts and other sheet-metal products in new houses, stores, offices, and other buildings. |
| **Structural-, Ornamental-, and Reinforcing-Iron Workers, Riggers, and Machine Movers** | 95,000 | 3,400 | The growing use of structural steel in buildings is expected to create a need for more structural ironworkers. Opportunities for ornamental ironworkers should expand because of the growing popularity of ornamental panels for large buildings and the use of metal frames to hold large panes of glass. More riggers and machine movers will be needed to handle the increasing amount of heavy construction machinery, while the growing demand for prestressed concrete should create additional jobs for reinforcing-ironworkers. |
| **OCCUPATIONS IN TRANSPORTATION ACTIVITIES** | | | |
| **Air Transportation Occupations** | | | |
| **Air Traffic Controllers** | 19,500 | 800 | Expected increase in the number of airplanes should result in a rapid employment increase. |
| **Aircraft Mechanics** | 123,000 | 7,000 | Very rapid employment growth as number of aircraft increases. Employment in the Federal Government, however, may fluctuate with changes in defense spending. Continued fuel shortages may adversely affect employment growth. |

[1] See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Airline Dispatchers** | 800 | 20 | Little or no employment change due to improved communications equipment. |
| **Flight Attendants** | 39,000 | 8,000 | Very rapid employment increase as aircraft become larger and increase in number. Many additional openings also will occur as attendants transfer to other occupations. Continued fuel shortages may adversely affect employment growth. |
| **Flight Engineers** | 7,000 | 300 | Rapid employment growth due to expected increase in the number of aircraft. Continued fuel shortages may adversely affect employment growth. |
| **Ground Radio Operators and Teletypists** | 5,700 | 100 | Slow employment decline due to automatic communications systems and improvements in two-way radios that permit direct communications between pilots and air traffic controllers. |
| **Pilots and Copilots** | 54,000 | 2,000 | Very rapid employment increase due to growth in the number of aircraft. Continued fuel shortages may adversely affect employment growth. |
| **Traffic Agents and Clerks** | 59,000 | 7,000 | Very rapid employment increase because of the anticipated growth of passenger and cargo traffic. |
| **Merchant Marine Occupations** | | | |
| **Merchant Marine Officers** | 15,000 | 200 | A decline in employment is anticipated as ships become more automated and mechanized. Some openings will result from deaths and retirements. |
| **Merchant Seamen** | 42,000 | 100 | A decline in employment is anticipated as ships become more automated and mechanized. Some openings will result from deaths and retirements. |
| **Railroad Occupations** | | | |
| **Brakemen** | 73,000 | 400 | Employment is expected to decline, but some openings will arise from deaths and retirements. |
| **Bridge and Building Workers** | 10,500 | 200 | Slowly declining employment, but a few openings will arise from deaths and retirements. |
| **Clerks** | 82,600 | 2,700 | Moderately declining employment. Some openings will occur from deaths and retirements. |
| **Conductors** | 38,000 | 700 | Slow employment decline due to reduced passenger traffic and the use of electric and electronic communications equipment. Some openings will arise from deaths and retirements. |
| **Locomotive Engineers** | 35,000 | 1,000 | Employment is expected to show little or no change. Nearly all openings will arise from deaths and retirements. |
| **Locomotive Firemen** | 14,900 | (2) | Employment should decline rapidly. Some openings, however, will develop as experienced workers retire, die, or are promoted to engineer positions. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Shop Trades** | 78,000 | 900 | Slow employment decline, but a few openings will arise from deaths and retirements. |
| **Signal Department Workers** | 11,000 | (²) | Improved signaling and communications systems that require less maintenance will reduce the need for workers. |
| **Station Agents** | 8,700 | (²) | Moderate employment decline. There will be, however, a limited number of job openings to replace workers who retire or die. |
| **Telegraphers, Telephoners, and Towermen** | 11,200 | (²) | Rapid decline in employment because of the wider use of automatic signaling systems. A few new workers, however, will still be needed to replace those who retire or die. |
| **Track Workers** | 54,000 | 900 | Slow employment decline. Although several thousand workers may be hired each summer to do maintenance jobs that cannot be done during the winter, few will be hired for year-round jobs. |
| **Driving Occupations** | | | |
| **Intercity Busdrivers** | 25,000 | 500 | Little or no change in employment is expected, but hundreds of job openings will become available yearly from deaths and retirements. |
| **Local Transit Busdrivers** | 68,000 | 1,600 | Slow employment rise as bus service is improved and expanded in urban areas. |
| **Local Truckdrivers** | 1,600,000 | 46,000 | Moderate employment increase because of growth in the volume of freight. |
| **Long Distance Truckdrivers** | 570,000 | 16,600 | The additional amount of freight carried long distances by truck and the location of new stores, factories, and warehouses in suburban or semirural areas where rail facilities are limited are expected to result in a moderate employment increase. |
| **Parking Attendants** | 33,000 | 1,600 | Slow employment growth. Most openings will be in large commercial parking lots in urban areas. |
| **Taxi Drivers** | 92,000 | 1,600 | Slow decline in employment because of the increased use of private and rented cars and buses and subways. There will, however, be many openings each year from deaths and retirements. Transfer to other occupations will create additional openings. |
| **SCIENTIFIC AND TECHNICAL OCCUPATIONS** | | | |
| **Conservation Occupations** | | | |
| **Foresters** | 22,000 | 900 | The annual number of forestry graduates could exceed the number of annual openings, resulting in keen competition for jobs. Opportunities also will be affected by the number of qualified entrants from other sources and the increasing use of technicians and forestry aides. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| Forestry Aides | 14,500 | 800 | Favorable employment opportunities especially for those with specialized posthigh school technical training in forestry. |
| Range Managers | 4,000 | 150 | Slow employment increase. However, because hiring needs are dependent on Federal legislation, public concern for environmental protection could create additional opportunities. |
| **Engineering Occupations** | 1,100,000 | 53,000 | |
| Aerospace Engineers | 62,000 | 1,700 | Moderate employment growth because of ongoing or planned programs to develop more versatile and sophisticated aircraft, missiles, space vehicles, and ground transportation systems. Opportunities depend on the level of defense and space spending, which can rise or fall sharply. |
| Agricultural Engineers | 12,000 | 500 | Rapidly growing job opportunities because of modernization of farm operations, increasing emphasis on conservation, and the use of agricultural products and wastes as industrial raw materials. |
| Biomedical Engineers | 3,000 | 200 | Favorable job opportunities since the number of graduates is expected to be smaller than the number of openings. Those with advanced degrees will be in strong demand to teach and to develop devices such as artificial hearts. |
| Ceramic Engineers | 12,000 | 500 | Very good employment opportunities. Engineers will be needed to develop ceramic materials for electronics and medical science fields and to improve traditional ceramic products. |
| Chemical Engineers | 47,000 | 1,500 | Moderate employment growth as a result of industrial expansion, especially in the chemical industries, where workers will be needed to design, build, and maintain plants and equipment for more complex chemical processes. |
| Civil Engineers | 177,000 | 8,500 | Opportunities should expand rapidly as a result of urban construction projects for housing, water supply, highway construction, sewage disposal, and rapid transit systems. |
| Electrical Engineers | 231,000 | 11,000 | Very rapid employment growth due to demand for electrical equipment to automate and mechanize production processes, especially computers and numerical controls for machine tools. Growing demand for electrical and electronic consumer goods also will spur employment. |
| Industrial Engineers | 125,000 | 7,400 | Very rapid growth in job opportunities as more emphasis is placed on scientific management and safety. More complex industrial operations and expansion of automated processes also will require more industrial engineers. |
| Mechanical Engineers | 209,000 | 8,900 | Very rapid employment growth due to demand for industrial machinery and machine tools and the increasing technological complexity of industrial machinery and processes. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Metallurgical Engineers** | 10,000 | 500 | Rapid growth in job opportunities resulting from the need to develop metals and new alloys, especially for aircraft, spacecraft, and computers. |
| **Mining Engineers** | 5,000 | 100 | Favorable opportunities since the number of graduates each year is expected to be smaller than replacement needs. The need to develop new mining techniques to recover fuel resources will create additional jobs. |
| **Environmental Science Occupations** | | | |
| **Geologists** | 23,000 | 1,100 | Favorable opportunities at all degree levels if past patterns of entry into the field continue. Those with only the bachelor's degree will have better opportunities if they have training in techniques of geophysical exploration. |
| **Geophysicists** | 8,000 | 400 | Good employment opportunities for new graduates. As in the past, the number of new geophysics graduates should be smaller than that of openings. |
| **Meteorologists** | 5,000 | 200 | Favorable employment opportunities especially for those with advanced degrees to conduct research, teach, and engage in management and consulting work. The use of weather satellites, manned spacecraft, and electronic computers has expanded the work of meteorologists. |
| **Oceanographers** | 4,500 | 200 | Favorable employment prospects for oceanographers with the Ph. D. degree, especially those in ocean engineering. Those with less education may face competition for entry jobs and find opportunities limited to doing routine analytical work as research assistants. |
| **Life Science Occupations** | | | |
| **Biochemists** | 12,500 | 700 | Favorable opportunities for graduates with advanced degrees primarily due to increased research and development expenditures, especially for medical research. |
| **Life Scientists** | 160,000 | 9,200 | New graduates may face severe competition since the number of graduates is expected to grow more rapidly than employment opportunities. However, those with advanced degrees, especially the Ph. D., will experience the least competition. Medical scientists should find the best opportunities due to the emphasis on research of cancer, heart, and other diseases. Those with only an undergraduate degree may be limited to research assistant or technician jobs. |
| **Mathematics Occupations** | | | |
| **Mathematicians** | 76,000 | 4,200 | The number of entrants may exceed openings, creating competition. Those with Ph. D. may have less difficulty finding jobs than persons with less education. |
| **Statisticians** | 23,000 | 1,700 | Favorable employment prospects for persons who can combine training in statistics with knowledge of a field where it can be applied, such as economics. Statisticians will be needed by government and private industry, especially to forecast trends and modernize accounting procedures. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Physical Science Occupations** | | | |
| **Astronomers** | 2,000 | 100 | Some competition may exist for beginning jobs, even for those with a Ph. D. degree. Despite the small number receiving the doctorate each year, there may be even fewer openings. Opportunities are heavily dependent on Federal funds for basic research in astronomy. Funds are expected to increase but more slowly than during the 1960's. |
| **Chemists** | 134,000 | 6,800 | Favorable employment opportunities. Demand for industrial products, further research on urgent pollution and fuel shortage problems, and the need for health-related research will contribute to the need for additional chemists. |
| **Food Scientists** | 7,500 | 300 | Favorable job opportunities. Increased research and development will require food scientists with advanced degrees. More scientists with the bachelor's degree will be needed to ensure quality and safety of processed products. |
| **Physicists** | 49,000 | 1,500 | Favorable job opportunities for those with advanced degrees, primarily in applied research and development. Limited opportunities for those with bachelor's degrees although they may find openings in other occupations that utilize their training. For example, they may become high school teachers once they have completed the required educational courses and obtained a State teaching certificate. |
| **Technicians Occupations** | | | |
| **Broadcast Technicians** | 23,000 | 700 | Slow employment growth, with most openings resulting from deaths and retirements. Some openings will occur as new radio and television stations open, but laborsaving devices will limit demand. |
| **Draftsmen** | 327,000 | 17,900 | Skilled draftsmen, especially those with posthigh school training, are expected to have favorable employment opportunities. |
| **Engineering and Science Technicians** | 707,000 | 39,600 | Favorable employment opportunities, especially for graduates of postsecondary training programs. Rapid growth will result from industrial expansion and increasing opportunities in the fields of atomic energy, environmental control, and urban development. |
| **Food Processing Technicians** | 4,500 | 200 | Favorable employment opportunities especially for those with posthigh school training in food technology. The demand for convenience foods and the requirements for higher quality and safety standards in food processing will require more technicians. |
| **Surveyors** | 58,000 | 2,700 | Good employment opportunities especially for those with posthigh school training, because of increased development of land for public, commercial, and residential use. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **MECHANIC AND REPAIR OCCUPATIONS** | | | |
| **Telephone Craft Occupations** | | | |
| **Central Office Craft Occupations** | 105,000 | 2,000 | Moderate increase in employment as the demand for telephone service grows. |
| **Central Office Equipment Installers** | 30,000 | 1,200 | Moderate employment increase anticipated because of the need to install equipment in new central offices and replace obsolete equipment in existing offices. |
| **Linemen and Cable Splicers** | 50,000 | 700 | Because of laborsaving improvements in equipment, employment of linemen is expected to show little or no change. Some openings, however, will occur from deaths and retirements, Moderate employment growth of cable splicers to keep pace with the high levels of cable installation and maintenance. |
| **Telephone Servicemen** | 108,000 | 2,000 | Moderate employment increase due to the growing demand for telephones and private branch exchange (PBX) and automatic switching (CENTREX) systems. Technological advances that have increased the efficiency of servicemen, however, will limit growth. |
| **Other Mechanics and Repairers Occupations** | | | |
| **Air-Conditioning, Refrigeration, and Heating Mechanics** | 135,000 | 13,100 | Rapid employment growth with most openings for air-conditioning and refrigeration mechanics. Rapid employment growth also of furnace installers and gas burner mechanics, while the number of oil burner mechanics should remain fairly stable. |
| **Appliance Servicemen** | 130,000 | 6,100 | Rapid growth in employment because of the increase in the number and variety of household appliances. |
| **Automobile Body Repairmen** | 161,000 | 4,100 | Moderate employment growth because of the rising number of automobiles damaged in traffic accidents. |
| **Automobile Mechanics** | 727,000 | 22,300 | Moderate employment increase as a result of more automobiles and added features that increase maintenance requirements, such as pollution control devices. |
| **Boat-Motor Mechanics** | 10,300 | 500 | The growth in the number of boats and machinery with small gasoline engines should result in a moderate employment increase. |
| **Bowling-Pin-Machine Mechanics** | 6,000 | 200 | Improved pinsetting machines are expected to limit growth. Most openings will occur due to deaths and retirements. |
| **Business Machine Servicemen** | 69,000 | 3,000 | Very rapid employment increase. Opportunities particularly good for those who have training in electronics. |
| **Computer Service Technicians** | 45,000 | 4,100 | Expanding use of computers should result in a very rapid growth in employment. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Diesel Mechanics** | 92,000 | 4,500 | Rapid employment increase due to the expansion of industries that are major users of diesel engines. |
| **Dispensing Opticians and Optical Mechanics** | 30,000 | 2,000 | Very rapid employment increase due to growth in demand for prescription lenses. |
| **Electric Sign Servicemen** | 8,000 | 500 | Anticipated large increase in the number of signs should cause employment to grow very rapidly. |
| **Farm Machinery Mechanics** | 47,000 | 1,400 | Slow employment increase. Trend toward bigger, more mechanized farms and the increased reliability of farm machinery will limit growth. |
| **Industrial Machinery Repairmen** | 430,000 | 44,000 | Rapid employment increase because of the growing amount of factory machinery needing maintenance and repair. |
| **Instrument Repairmen** | 100,000 | 4,800 | Anticipated increase in use of instruments in such areas as oceanography, pollution monitoring, and medical diagnosis should result in rapid employment increase. |
| **Jewelers** | 18,000 | 800 | Little or no employment change. While demand for jewelry is growing, most is for costume jewelry which is mass produced and seldom worth repairing. Some openings, however, will arise from deaths and retirements. |
| **Locksmiths** | 9,200 | 500 | Moderate employment growth in this relatively small occupation. Best opportunities will be for those who can install and service electronic security systems. |
| **Maintenance Electricians** | 260,000 | 9,800 | Moderate employment increase due to the growing amount of electrical and electronic equipment in industry. |
| **Motorcycle Mechanics** | 9,600 | 800 | Rapid employment increase due to the growing popularity of motorcycles, minibikes, and snowmobiles. There may be some seasonal fluctuations in employment because cycling activity increases in summer. |
| **Piano and Organ Servicemen** | 7,000 | 320 | Little growth is expected in the number of piano tuners, piano technicians, and pipe organ technicians. Moderate employment increase for technicians to service electric organs. |
| **Shoe Repairmen** | 30,000 | 1,200 | Slowly declining employment, but some openings will arise from deaths and retirements. |
| **Television and Radio Service Technicians** | 144,000 | 4,400 | Moderate employment growth is anticipated because of the growing number of radios, televisions, phonographs, and other home entertainment products. |
| **Truck Mechanics and Bus Mechanics** | 130,000 | 5,100 | Rapid employment increase of truck mechanics, while the number of bus mechanics is not expected to change significantly. In both occupations, many openings will arise from deaths and retirements. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Vending Machine Mechanics** | 29,000 | 1,500 | Rapid employment increase to keep pace with the growing number of vending machines. |
| **Watch Repairmen** | 16,000 | 700 | Little or no change in employment because most watches now made will cost little more to replace than repair. Some openings will result from deaths and retirements. |
| **HEALTH OCCUPATIONS** | | | |
| **Dental Occupations** | | | |
| **Dental Assistants** | 115,000 | 13,000 | Excellent employment prospects for dental assistants especially for graduates of approved training programs. |
| **Dental Hygienists** | 17,000 | 4,800 | Demand for dental hygienists is likely to continue to outstrip supply. Very good opportunities for both full- and part-time workers. |
| **Dental Laboratory Technicians** | 32,000 | 2,000 | Very good employment prospects for experienced technicians. Very favorable opportunities for recent graduates of approved training programs, also. |
| **Dentists** | 105,000 | 5,300 | Favorable employment opportunities through the mid-1980's. Newly added teaching facilities in dental schools should allow the supply of dentists to approach needs by 1985. |
| **Medical Practitioner Occupations** | | | |
| **Chiropractors** | 16,000 | 1,000 | Favorable opportunities. Population growth and inclusion of chiropractic services in many insurance programs are expected to result in a moderate increase in demand. |
| **Optometrists** | 18,700 | 900 | Favorable employment outlook for this moderately growing occupation. Most openings will result from deaths and retirements. |
| **Physicians and Osteopathic Physicians** | 330,000 | 19,000 | Very good employment opportunities for physicians. |
| **Podiatrists** | 7,300 | 400 | Favorable opportunities for new graduates to establish their own practices as well as to enter salaried positions. |
| **Veterinarians** | 26,000 | 1,400 | Favorable employment outlook. Supply is expected to increase more rapidly than in the past, however, because of increased capacity of veterinary schools. |
| **Medical Technician, Technologist, and Assistant Occupations** | | | |
| **Electrocardiographic Technicians** | 10,000 | 900 | Very rapid employment growth is expected due to increased use of electrocardiographs in diagnosis and in routine physical checkups. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Electroencephalographic Technicians** | 3,500 | 400 | A very rapid increase in employment is expected as electroencephalographs become widely used to diagnose brain diseases and monitor patients with brain disorders and those undergoing surgery. |
| **Medical Assistants** | More than 200,000 | 25,000 | Excellent employment opportunities due to the very rapid growth in the number of physicians, the principal employers of medical assistants. Graduates of 2-year college programs will be especially in demand. |
| **Medical Laboratory Workers** | 165,000 | 13,000 | Moderate employment expansion as a result of wide use of laboratory services by physicians. |
| **Medical Record Technicians and Clerks** | 47,000 | 10,500 | Very good employment prospects for medical record clerks. Favorable outlook for medical record technicians with an associate degree. Technicians with less education may face competition by 1985. |
| **Operating Room Technicians** | 25,000 | (1) | Excellent employment opportunities as operating room technicians increasingly assume more of routine tasks formerly performed by nurses in the operating room. |
| **Optometric Assistants** | 11,000 | 1,700 | Very rapid employment increase due to the growing number of optometrists, the increasing size of their practices, and the trend toward delegating more of the optometrists' technical duties to well-trained assistants. Best opportunities for those who have completed formal training programs. |
| **Radiologic Technologists** | 55,000 | 6,500 | Favorable outlook for both full- and part-time workers due to expansion in the use of X-ray equipment and the growing demand for medical services in general. |
| **Respiratory Therapists** | 17,000 | 2,000 | Very good opportunities for well-qualified respiratory therapists in this rapidly growing new field. |
| **Nursing Occupations** | | | |
| **Licensed Practical Nurses** | 425,000 | 70,000 | Very good opportunities as health facilities continue to expand and as practical nurses are increasingly utilized to lighten the loads of registered nurses. |
| **Nursing Aides, Orderlies, and Attendants** | 900,000 | 100,000 | Very rapid employment rise. Most openings will occur from the need to replace workers who die or retire. |
| **Registered Nurses** | 748,000 | 75,000 | Favorable employment prospects especially for nurses with graduate training seeking positions as teachers and administrators. |
| **Therapy and Rehabilitation Occupations** | | | |
| **Occupational Therapists** | 7,500 | 1,100 | Favorable employment prospects for the growing number of graduates. The success of occupational therapy programs has spurred demand in this field. |

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Occupational Therapy Assistants** | 6,000 | 1,200 | Very good employment outlook for graduates of approved occupational therapy assistant programs. Anticipated very rapid growth in the occupation also should create many openings for those receiving on-the-job training. |
| **Physical Therapists** | 18,000 | 2,200 | Favorable employment outlook for the rapidly growing number of new therapists. Increased recognition of the importance of rehabilitation and the growth of nursing homes will result in very rapid employment growth. |
| **Physical Therapist Assistants and Aides** | 10,500 | 2,000 | The expected very rapid growth in the field should result in excellent employment opportunities for both assistants and aides. |
| **Speech Pathologists and Audiologists** | 27,000 | 2,200 | Moderate employment increase. Outlook good for those who have completed graduate study. However, opportunities are limited at the bachelor degree level. |
| **Other Health Occupations** | | | |
| **Dietitians** | 33,000 | 3,100 | Rapid employment growth to meet the needs for management in the nutrition and food fields in hospitals and extended care facilities, schools, industrial plants, and commercial eating places. |
| **Hospital Administrators** | 17,000 | 1,600 | Favorable employment prospects for new graduates of programs at the master's degree level in health and hospital administration. Positions will be available for administrative assistants in hospitals, in nursing homes, and other health care facilities. |
| **Medical Record Administrators** | 11,600 | 1,400 | Excellent opportunities for graduates of approved programs for medical record administrators. Increased medical insurance coverage will enable more people to use health facilities, adding to the volume of medical records and the importance of well-administered medical record systems. |
| **Pharmacists** | 131,000 | 7,700 | Very good outlook due to moderate employment growth and openings from deaths and retirements. Many openings are expected in pharmacies in new communities and through the more extensive use of pharmacists' services in hospitals and clinics. |
| **Sanitarians** | 17,000 | 1,600 | Very good employment opportunities for sanitarians having a B.S. degree in environmental health especially in private industry. Favorable outlook for those having degrees in life, physical, or environmental science. |
| **SOCIAL SCIENCE OCCUPATIONS** | | | |
| **Anthropologists** | 3,600 | 400 | Ph. D.'s may face keen competition for choice professional positions. Persons with a master's degree in anthropology will have very keen competition but may find positions as college instructors. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| Economists | 36,000 | 1,500 | Economists with master's and doctorate degrees may find keen competition for better jobs in colleges and universities and private industry. Basic research will offer the best opportunities for those with a bachelor's degree. |
| Geographers | 7,500 | 450 | Favorable employment opportunities for geographers with Ph. D. degrees. Those with master's and bachelor's degrees in geography can expect competition for jobs. The largest number of employment opportunities will be in colleges and universities, although some opportunities will be available in environmental quality control, biogeography, and urban planning. |
| Historians | 24,000 | 1,500 | Experienced Ph. D.'s are expected to face keen competition for college teaching. New Ph. D. recipients and those with lesser degrees are likely to face very keen competition. High school teaching positions may be available for those meeting certification requirements. |
| Political Scientists | 10,000 | 500 | Ph. D.'s may face considerable competition for choice academic positions. Those with master's degrees are expected to face stiff competition for instructor positions but, with specialized training, may find jobs in government and industry. Limited opportunities for those with only a bachelor's degree. |
| Sociologists | 15,000 | 1,200 | Employment opportunities for Ph. D.'s are expected to be favorable though they may face some competition for choice academic jobs. Those with master's degrees are likely to face some competition for academic positions, but jobs in government and private industry will be available. |
| **SOCIAL SERVICE OCCUPATIONS** | | | |
| **Counselors** | | | |
| College Career Planning and Placement Counselors | 3,800 | 200 | Favorable overall outlook for well-qualified workers. Rapid growth may be moderated by financial problems in colleges and universities. Best prospects are in junior and community colleges. |
| Employment Counselors | 8,500 | 800 | Favorable opportunities for those with a master's degree or experience in a related field. Employment growth is largely dependent on money from the Federal Government and State allocation of this money to the employment service. |
| Rehabilitation Counselors | 16,000 | 1,700 | Favorable opportunities. Those with graduate work have the best prospects. Employment growth depends to a great extent on Federal funding. |
| School Counselors | 43,000 | 2,900 | Favorable employment opportunities in the long run due mainly to the Federal Government's Career Education Program. A decline in school enrollments until the late 1970's will moderate immediate growth. |

[1] See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **Clergy** | | | |
| **Protestant Ministers** | 325,000 | 13,000 | Keen competition in some denominations. Many members of the clergy, however, will find employment in education, social work, and as chaplains with the armed forces. |
| **Rabbis** | 5,800 | 300 | Possible shortage. Growth in Jewish religious affiliation and in the number of synagogues should continue with growing demand for rabbis to work in social welfare and with Jewish affiliated organizations. |
| **Roman Catholic Priests** | 58,500 | 2,200 | Growing number needed. Number of priests ordained insufficient to meet the needs of the growing Catholic population. |
| **Other Social Service Occupations** | | | |
| **Home Economists** | 120,000 | 9,200 | Despite an anticipated slow growth in employment, many job openings will be available due to deaths and retirements. Home economists wishing to teach in high schools may face competition, but those with graduate degrees should find good employment prospects in college and university teachings. |
| **Psychologists** | 57,000 | 4,300 | Good job outlook for clinical and counseling psychologists. Those wishing to teach or do research in large colleges and universities may face some competition. |
| **Recreation Workers** | 55,000 | 5,500 | Excellent employment opportunities for young people with a bachelor's degree in recreation. There will be many opportunities for part-time work. |
| **Social Service Aides** | 100,000 | 10,000 | Very rapid employment growth. Favorable opportunities for part-time work. |
| **Social Workers** | 185,000 | 17,500 | Excellent employment opportunities for those with graduate degrees. Favorable outlook through the 1970's for those with bachelor's degrees although competition may increase in the 1980's. |
| **ART, DESIGN, AND COMMUNICATIONS RELATED OCCUPATIONS** | | | |
| **Performing Arts Occupations** | | | |
| **Actors and Actresses** | 10,000 | 800 | Aspiring artists are expected to vastly exceed the number of jobs. Acting is an unsure business, and many performers are employed for only a small portion of the year. |
| Dancers | 5,000 | 500 | The number of prospective dancers is expected to greatly exceed the number of jobs. Highly talented ballet dancers should continue to be in short supply, however. Teaching offers the best job opportunities in the field. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings | Employment trends and prospects |
|---|---|---|---|
| **Musicians** | 85,000 | 5,200 | This field is very overcrowded causing keen competition among performers. However, there is always a demand in the symphonic area for musicians of high caliber. Best prospects are in teaching. |
| **Singers** | 36,000 | 2,400 | The singing field is highly competitive. A few opportunities should result from expanded use of video tape cassettes and cable TV, but the best prospects remain in teaching. |
| **Design Occupations** | | | |
| **Architects** | 37,000 | 3,300 | Favorable employment opportunities. Most rapid increases in employment in new areas such as urban redevelopment and environmental design and planning projects. Number of job openings in established architectural firms and opportunities for starting a private practice should grow more slowly. |
| **Commercial Artists** | 60,000 | 3,400 | Favorable employment prospects for those well-qualified. Young people with only average ability and little specialized training should face keen competition and have limited opportunities for advancement. |
| **Displaymen (Retail Trade)** | 33,000 | 2,000 | Moderate employment increase. |
| **Floral Designers** | 30,000 | 2,500 | Very rapid employment increase due to rising demand for floral arrangements. |
| **Industrial Designers** | 10,000 | 400 | Those with a degree in designing may face competition from other talented persons with engineering or architectural backgrounds. Employers, however, are expected to actively seek applicants with a design degree and outstanding talent. |
| **Interior Designers** | 18,000 | 1,000 | Competition for beginning jobs. Best job prospects for talented art school or college graduates majoring in interior design. Those with less talent or without formal training likely to face keen competition. |
| **Landscape Architects** | 12,000 | 1,100 | Favorable employment opportunities for those with professional training. More emphasis on urban and regional environmental planning and a better standard of living for an increasing segment of the population should expand opportunities. |
| **Photographers** | 77,000 | 2,750 | Good opportunities in the rapidly growing technical fields, such as scientific or industrial photography and photojournalism. Portrait and commercial photographers should face keen competition. |
| **Urban Planners** | 12,000 | 800 | Very good prospects for those with training in city and regional planning. Construction of new cities and towns and urban renewal projects are expected to spur demand for these workers. |

See footnotes at end of table.

| Occupation | Estimated employment 1972 | Average annual openings[1] | Employment trends and prospects |
|---|---|---|---|
| **COMMUNICATIONS AND RELATED OCCUPATIONS** | | | |
| **Interpreters** | 600 | (3) | Competition should be expected for the limited number of positions. Favorable employment opportunities for only the highly qualified. |
| **Newspaper Reporters** | 39,000 | 2,600 | Favorable employment prospects for young people with exceptional writing talent and ability to handle highly specialized subjects. Newspapers in small towns and suburban areas will offer the most opportunities for beginners. |
| **Radio and Television Announcers** | 21,000 | 500 | Moderate employment increase. Opportunities are likely to be better in radio than in television. Young people will face stiff competition because of the large number of persons interested in this type of work. |
| **Technical Writers** | 20,000 | 1,100 | Favorable opportunities for experienced technical writers and beginners with writing ability, a bachelor's degree, and technical knowledge. Those with the minimum qualifications, however, are likely to face stiff competition. |

**Footnotes**

[1] Due to growth and death, retirement, and other separations from the labor force. Does not include transfers out of the occupation.

[2] For the Nation as a whole, the projected decrease in employment is expected to be greater than the number of openings resulting from deaths and retirements. However, in some localities the decline in employment may be less than the national average. In such cases, job openings resulting from deaths and retirements may be greater than the decline in employment. In some areas, employment growth may occur.

[3] Estimate not available.

# Educational Grants Available

A little short on cash for tuition? Apply for a Basic Educational Opportunity Grant from the U.S. Office of Education. The $122 million available is expected to benefit a half-million students who might otherwise be unable to continue their education.

Grants will be made only to full-time high school graduates in need of financial help, who plan to attend any approved college, institute, or hospital school of nursing. How much a student or his family can contribute affects the amount of his basic grant, which is determined according to a U.S. Office of Education formula.

To request a grant, students must submit an "Application for Determination of Expected Family Contribution," obtained from high school guidance offices, financial aid offices at postsecondary institutions, or any post office or State employment office. Within a month, the student is notified of the amount of his family's expected contribution. He then submits the notification to the school of his choice, which calculates the amount of the basic grant to which he is entitled.

## Nursing Without Diploma

A diploma from an accredited school of nursing is no longer required to take New York State's licensing examination to become a registered nurse. It is now possible to qualify for the test by passing a series of examinations that test academic knowledge and on-the-job performance. For details: New York State Department of Education, Albany, N.Y. 12225.

# APPENDIX D

## Supplement 3 to Tomorrow's Manpower Needs

Matching Occupation Classifications to Vocational Education Program Codes

# TOMORROW'S MANPOWER NEEDS

## National manpower projections and a guide to their use as a tool in developing State and area manpower projections

Supplement 3

Matching Occupational Classifications to Vocational Education Program Codes

U.S. DEPARTMENT OF LABOR
Peter J. Brennan, Secretary
BUREAU OF LABOR STATISTICS
Julius Shiskin, Commissioner

1973

# Preface

The manpower and educational legislation enacted during the last decade has continuously underscored the need for manpower planning and information on current and projected occupational requirements. To help guide educators and manpower planners, the Bureau of Labor Statistics (BLS), in cooperation with the Manpower Administration, prepared *Tomorrow's Manpower Needs,* BLS Bulletin 1606. This four-volume report presented detailed national manpower projections by occupation and industry, together with a guide to their use in developing similar reports at the State and local levels. Since the procedures outlined require that local manpower analysts have the most recent and accurate national manpower information available, BLS has periodically revised and updated its data and refined its methods. The full series of publications is as follows:

Tomorrow's Manpower Needs:

Vol. I Developing Area Manpower Projections, Bulletin 1606 (1969).

Vol. II National Trends and Outlook: Industry Employment and Occupational Structure, Bulletin 1606 (1969).

Vol. III National Trends and Outlook: Occupational Employment, Bulletin 1606 (1969).

Vol. IV The National Industry-Occupational Matrix and Other Manpower Data, Bulletin 1606 (1969).

Supplement No. 1 Revised Projections of Construction Manpower Requirements, Bulletin 1606 (1970).

Supplement No. 2 New and Revised National Industry Projections to 1975 and Procedures for Adjusting Wage and Salary Employment to Total Employment, Bulletin 1606, (1970).

Vol. IV Revised 1971 The National Industry-Occupational Matrix and Other Manpower Data, BLS Bulletin 1737 (1972).

Research Report on Manpower Projection Methods, Bulletin 1769 (1973).

The following report seeks to improve the usefulness of these publications for vocational educators and others interested in manpower planning by providing a link between the occupational classification system used in *Tommorow's Manpower Needs* and the categories which identify vocational education instructional programs.

This report was prepared by David P. Evans in the Division of Manpower and Occupational Outlook, Office of Manpower Structure and Trends.

# Contents

Page

Introduction . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

Occupational classification systems . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1

The *Tomorrow's Manpower Needs* (TMN) occupational classification . . . . . . . . . . . . . . . . . 2

The Census occupational classification . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2

The *Dictionary of Occupational Titles* (DOT) classification and codes . . . . . . . . . . . . . . . . . 3

Office of Education classification . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4

The conversion table . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4

Structure of the table . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4

Limitations . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6

Needed improvements . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 7

Tables:

1. Conversion of TMN occupational titles to vocational education classification system . . . . . . . . . . . 8

2. Vocational education instructional programs and related TMN occupational titles . . . . . . . . . . . . 19

# Matching Occupational Classifications to Vocational Education Program Codes

## Introduction

In the course of meetings between staff members of the Bureau of Labor Statistics and vocational educators seeking to use BLS data for planning purposes, it has become clear that a link is needed between data published by the Bureau on projected employment by occupation and data published by the Office of Education on enrollments in vocational programs. The inability to translate the occupational projections into specific curriculum needs apparently has hindered the efficient use of the projections for educational planning.

This report offers a bridge between the system used to classify occupations in the BLS study *Tomorrow's Manpower Needs* (TMN) and the system used by the Office of Education of the U.S. Department of Health, Education, and Welfare to classify instructional programs. This bridge, in the form of a conversion table, may enable educators, employment security agencies, and others to make better use of BLS manpower projections for educational planning. For example, it may be helpful in translating the information State employment agencies provide to vocational educators as directed under the Reports and Analysis Letter #685 (May 15, 1970), "Annual Report on State and Area Occupational Requirements for Vocational Education."

Unfortunately, the classification systems as they are presently constructed do not permit a clear-cut matching of categories on a one-to-one basis. But in most localities the supply of trained workers in specific occupations is not so close to the estimated demand that precise matching is required for judicious planning. In fact, *relative* measures of unmet need, that is, a *ranking* of the differences between demand and supply in each instructional program, may be a less risky method for setting planning priorities.[1]

The conversion table developed in this report is intended only as an interim solution. The clarification of occupational classification systems awaits the completion of the *Standard Occupational Classification System* sponsored by the Office of Management and Budget[2] or the revision of the vocational education codes.

### Occupational Classification Systems

Perhaps the fundamental barrier to a perfect matching of manpower projections and instructional programs is that the various classification systems were developed for different purposes. The vocational education instructional program codes were created primarily to facilitate educational planning, to standardize terminology, and to simplify reporting of educational statistics. The instructional programs are composites of subject matter organized to facilitate the teaching of certain skills that often encompass a variety of jobs. On the other hand, the occupational classification schemes incorporated in manpower projections were designed primarily to enumerate jobs which require extensive formal or specialized training or in which large numbers of people are employed. In short, the problem is that the cluster of jobs in an instructional program frequently differs from the cluster of jobs in an occupational title.

Nevertheless, a conversion table can be developed which can relate many of the elements of the classification systems. The conversion table presented in this study (table 1, p. 8) was developed by first relating the TMN occupational classification system to the *Dictionary of Occupational Titles* (DOT) and then relating the DOT to the vocational education program codes. The first step was made possible by a table that converts the 1960 Census occupational classification to the DOT.[3] The second step was made possible through a table that links the DOT to vocational education programs.[4] Thus, the bridge between the two systems is the DOT.

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[1] This approach has been suggested by many vocational education researchers. For example, see Robert C. Young, William V. Clive, and Benton E. Miles, *Vocational Education Planning: Manpower, Priorities, and Dollars* (Columbus, Ohio State University, Center for Vocational and Technical Education, 1972).

[2] The Office of Management and Budget is preparing a new occupational classification system such that each of the various agencies' classification systems will be comparable with the new system as well as with each of the other classifications. The project is scheduled for public review in early 1974.

[3] *Conversion Table: Bureau of the Census – Dictionary of Occupational Titles* (U.S. Department of Labor, 1970).

[4] *Vocational Education and Occupations* (U.S. Department of Health, Education, and Welfare and U.S. Department of Labor, 1969).

Inasmuch as an understanding of the various classification systems and their limitations is essential to the effective use of the conversion table, the following sections outline the major characteristics of each system.

### The *Tomorrow's Manpower Needs* occupational classification

The occupational classification used in the TMN system is based primarily on the Census Bureau's classification.[5] The 1960 Census is used because it is the basis for the more than 40 published State manpower projections using the TMN method. A conversion table based on the occupation categories of the 1970 Census will be developed as th States begin to use the 1970 Census information to date their current, or develop new, manpower projecti s and as comparisons are made of the content of the 60 and 1970 Censuses. Preliminary research indic s that over 100 (62 percent) of the 1960-Census-base TMN occupational titles are strictly comparable with the 1970 Census. These TMN occupational titles are marked with an asterisk in the conversion table.

The BLS matrix and the Census both classify occupations into broad socioeconomic groups – professional and technical, clerical, operatives, etc. Both include residual categories for each socioeconomic group so that the sum of all categories will equal total employment.

In spite of these similarities, however, there are certain differences between the BLS and Census occupational classification schemes. First, the BLS matrix is limited to 163 occupations, or occupational groups, out of 296 listings in the 1960 Census. The matrix was limited primarily to occupations that require extensive formal or specialized training or employ large numbers of people. Moreover, some of the Census occupational titles were not included because they were "new" occupations and, with no historical data, could not be used for projection purposes.

To supplement data from the 1960 Census of Population, the BLS matrix uses a number of other sources which provide information on employment in one or a few occupations or on the occupational composition of particular industries.[6] Sources other than the Census are used when they are more reliable. The major supplemental sources are Federal regulatory and nonregulatory agencies, professional societies, the U.S. Civil Service Commission, and BLS occupational wage surveys. In some cases, data were used from other sources for which there are no comparable Census titles. For example, the matrix title *Assemblers, metal working, class B* comes from BLS-sponsored wage surveys and does not appear in the Census occupational classification. Instead, it is contained within the very broad Census title *Assemblers.*

The content of the occupational groups remains, however, virtually identical to those used in the Census. For example, the statistics on employment of engineers taken from the BLS survey of employers differ from Census data, but the job content of this occupation in the BLS survey is, with only minor differences, the same as that in the Census category.

On the whole, then, the Census data, with only a few exceptions, are the basis for the national matrix. Moreover, the Census generally is the only source of data for State TMN reports. As a result, the conversion table in this report is shown in terms of Census categories.

### The Census occupational classification

In the 1960 Census of Population, every fourth household was asked to supply information about the social and economic characteristics of its members, including their occupation and industry of employment. The responses were classified into 296 occupations or occupational groups and cross-tabulated for 149 industries.[7]

The 296 occupational categories were arranged into 11 major groups and identified by 3-digit and single-letter codes as follows:

| | | |
|---|---|---|
| 000 | to 195 | Professional, technical, and kindred workers |
| N | and 222 | Farmers and farm managers |
| R | and 250 to 285 | Managers, officials, and proprietors, except farm |
| Y, Z | and 301 to 360 | Clerical and kindred workers |
| S | and 380 to 395 | Salesworkers |
| Q | and 401 to 555 | Craftsmen, foremen, and kindred workers |
| T, W | and 601 to 721 | Operatives and kindred workers |
| P | and 801 to 803 | Private household workers |
| 810 | to 890 | Service workers, except private household |
| U, V | and 901 & 905 | Farm laborers and foremen |
| X | and 960 to 973 | Laborers, except farm and mine |

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[5] See *Occupation by Industry*, U.S. Census of Population PC(2)-7C (Bureau of the Census, 1963).

[6] For an explanation of how the various sources are used in the national matrix, consult *Occupational Employment Patterns for 1960 and 1975*, Bulletin 1599 (Bureau of Labor Statistics, 1968).

[7] The list of occupational categories is shown on pp. XIX–XXIV of the *Alphabetical Index of Occupations and Industries*, (Bureau of the Census, 1960).

The *Classified Index of Occupations and Industries*[8] presents, for each category in the Census occupational and industrial classification system, the individual titles that constitute the particular category. The list of titles for each category provided the basis for the definition of Census categories in terms of DOT.[9]

### *Dictionary of Occupational Titles (DOT)* classification and codes

Nearly 22,000 occupations are defined in the *Dictionary of Occupational Titles.*[10] Each occupation in the DOT is given a 6-digit code number to reflect the kind and level of work performed, and three additional digits may be assigned to further differentiate occupations.[11] The 6-digit code numbers are used primarily by State employment services for classifying applicants and job openings and for other operating purposes. They also may be used by educators for defining job duties, career ladders, and occupational skills and training requirements.

The first three digits of the DOT code arrange jobs according to some combination of work field, purpose, material, product, service, subject matter, generic term, and/or industry. The first digit arranges jobs into nine broad categories:

| | |
|---|---|
| 0<br>1 | Professional, technical, and managerial occupations |
| 2 | Clerical and sales occupations |
| 3 | Service occupations |
| 4 | Farming, fishery, forestry, and related occupations |
| 5 | Processing occupations |
| 6 | Machine trades occupations |
| 7 | Benchwork occupations |
| 8 | Structural work occupations |
| 9 | Miscellaneous occupations |

These categories are divided into 84 2-digit divisions, and the divisions are divided into 603 separate 3-digit groups. Each additional digit adds greater specificity to the category. For example, the three digits of the code 201 indicate:

First digit: category 2 (clerical and sales occupations)
Second digit: division 20 (stenography, typing, filing, and related occupations)
Third digit: group 201 (secretaries)

The fourth, fifth, and sixth digits of the code numbers specify the worker functions in relation to data, people, and things. Each one of the job requirements is arranged in a hierarchy. Each job is identified with the highest appropriate relationship for each of the three job-requirement classifications. Together, the second three digits of the code number are designed to express the level of complexity at which the worker is required to function for each job.

The worker function relationships are:

| *Data* (4th digit) | *People* (5th digit) | *Things* (6th digit) |
|---|---|---|
| 0 synthesizing | 0 mentoring | 0 setting up |
| 1 coordinating | 1 negotiating | 1 precision working |
| 2 analyzing | 2 instructing | 2 operating-controlling |
| 3 compiling | 3 supervising | 3 driving-operating |
| 4 computing | 4 diverting | 4 manipulating |
| 5 copying | 5 persuading | 5 tending |
| 6 comparing | 6 speaking-signaling | 6 feeding-offbearing |
| 7<br>8 no significant relationship | 7 serving | 7 handling |
| | 8 no significant relationship | 8 no significant relationship |

For example, the second three digits of the code for *Secretary* (.368) indicate:

Fourth digit: the worker function "compiling"–(3) in the "data" hierarchy

Fifth digit: the worker function "speaking-signaling"–(6) in the "people" hierarchy

Sixth digit: no significant relationship–(8) in the "things" hierarchy

In addition, the three digits indicate that secretaries must report and/or carry out prescribed actions; gather, collate, or classify information; exchange information; and give assignments and/or directions to assistants.[12]

The third group of three digits (seventh, eighth, and ninth) provides a unique suffix code for each job title defined in the DOT. The suffix code differentiates particular jobs within 6-digit job titles. Where a 6-digit code number is applied to only one job title, the suffix code is 010. Jobs that have identical 6-digit *Dictionary* codes begin with the 010 suffix code and progress in additive steps of 4: i.e., 014, 018, 022. For example, the 6-digit DOT title *Secretary* (201.368) is further differentiated into the following 9-digit job titles:

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[8] *U.S. Census of Population, 1960: Classified Index of Occupations and Industries* (Bureau of the Census, 1960).

[9] *Conversion Table: Bureau of the Census – Dictionary of Occupational Titles* (U.S Department of Labor, 1970).

[10] For a detailed explanation of the classification structure, see pp. XV – XXIV of Volume I of the *Dictionary of Occupational Titles, Third Edition (U.S. Department of Labor, 1965).*

[11] *Suffix Codes for Jobs Defined in the Dictionary of Occupational Titles, Third Edition* (U.S. Department of Labor, 1967).

[12] The relationships of worker functions within the data, people, and things hierarchies are explained and defined more fully on pp. 649-50 in Appendix A in Volume II of the *Dictionary of Occupational Titles.*

| | |
|---|---|
| 201.368-010 | *Legal secretary* |
| 201.368-014 | *Medical secretary* |
| 201.368-018 | *Secretary* |

### Office of Education classification

The codes for the instructional programs in the Office of Education classification system were intended to help local and State education agencies identify, classify, and describe information about subject matter and curriculum activities. Twenty subject-matter areas plus one area for cocurricular activities and one area for general elementary and general secondary education were identified in *Standard Terminology for Curriculum and Instruction in Local and State School Systems.*[13]

Seven of the 22 areas are frequently referred to as vocational-technical, and are:

| | |
|---|---|
| 01. | **Agriculture** |
| 04. | **Distributive education** |
| 07. | **Health occupations education** |
| 09. | **Home economics** |
| 14. | **Office occupations** |
| 16. | **Technical education** |
| 17. | **Trade and industrial occupations** |

The selection of the vocational-technical education areas, including the subject matter in them, was determined by (1) an extensive study of record and report forms of local school systems and State education agencies, (2) an extensive review of a wide range of professional literature concerned with subject-matter areas and cocurricular activities, and (3) conferences with numerous persons in State education agencies, local school systems, colleges and universities, and the U.S. Office of Education.

The Office of Education classification system was intended to provide a distinct identity for each program area and for each instructional program within it. Although the handbook of standard terminology contains 10-digit codes, the vocational-technical instructional programs have been limited largely to six digits. In several subject-matter areas, 8-digit codes were provided for greater detail. The interpretation of each position in the codes is as follows:

**First 2-digit position:** subject-matter area (e.g., 14, office occupations)

**Second 2-digit position:** principal segment of subject matter (e.g., 1402, business data processing systems occupations)

**Third 2-digit position:** division of principal segment (e.g., 14.0202, peripheral equipment operators)

**Fourth 2-digit position:** first-level detail of division of principal segment (e.g., 14.020201, key-punch and coding equipment operators)

**Fifth 2-digit position:** second-level detail of division of principal segment (no vocational education examples in office occupations; however, there are a few 10-digit codes in agriculture).

The vocational education instructional programs specified by the codes are defined in *Vocational Education and Occupations.*[14] The descriptions of the instructional programs are actually composites of subject matter rather than well-defined courses. Students may have to take courses in other areas of vocational and/or general education to round out their training. Moreover, the programs are not associated with any particular level of education and are, instead, general descriptions which may be related to several educational levels.

*Vocational Education and Occupations* also relates the instructional programs in the seven vocational-technical areas to DOT codes and titles. As indicated earlier, this relationship serves as the link between the BLS matrix and the vocational education codes. The other 15 instructional areas have not been defined in terms of their job content.

## The Conversion Table

### Structure of the table

The conversion table which was developed for this report is organized by TMN occupational title. Each TMN occupational title is related to the corresponding vocational education instructional program(s). The instructional programs are, in turn, related to the corresponding DOT codes and titles that are included in the TMN occupational category. For example, as shown in the illustration, the TMN occupational title

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[13] State Educational Records and Report Series: Handbook VI (U.S. Department of Health, Education, and Welfare, 1970).

[14] (U.S. Department of Health, Education, and Welfare and U.S. Department of Labor, 1969).

| 1960 Census code | TMN occupational title | Vocational education classification system |  | Dictionary of Occupational Titles |  |
|---|---|---|---|---|---|
|  |  | Code | Title | Code | Title |
| 414 | Compositors and typesetters | 17.1901 | Composition, makeup, and typesetting | 973.381<br>973.381<br>650.582 | Compositor<br>Job printer<br>Linotype operator |
|  |  | 17.1902 | Printing press occupations | 651.782 | Offset-pressman |

*Compositors and typesetters* has two major vocational education instructional programs: "Composition, makeup, and typesetting"; and "Printing press occupations". The first instructional program has three major DOT titles associated with it, while the instructional program "Printing press occupations" has one major DOT title related to it (Offset-pressman). All of the vocational education and DOT codes shown in the table are contained in the TMN occupational title (Census code 414).

*Ranking by employment.* Both the vocational education program codes and titles and the DOT codes and titles are listed in the conversion table in order of their percentage contribution to the total estimated employment in the TMN occupational title. For each TMN occupational title, the related DOT and vocational education codes are ranked vertically in their respective columns, so that the code that appears first contributes a relatively greater amount to the total estimated employment in that occupational title.

The listing of codes and titles in order of their percentage contribution to total estimated employment provides the vocational education administrator with some rough notion of the relative importance to be attached to the various instructional programs and their job content. For example, in the illustration above, the planner is informed that workers in occupations for which "Composition, makeup, and typesetting" trains students are relatively more numerous in that matrix title than workers in occupations for which "Printing press occupations" trains students. In addition, the ranking indicates that compositors are relatively more numerous in "Composition, makeup, and typesetting" than job printers and linotype operators. Planners should be cautioned, however, that they cannot make comparisons between job titles in different programs. For example, the table does *not* show that linotype operators are more numerous than offset-pressmen. Job titles and codes are ranked by percentage contribution to estimated total employment in the matrix title only for purposes of comparison within an instructional program.

Only those titles and codes that are estimated to include 5 percent or more of the employment in the related matrix occupational title are listed in the table. Listing the large number of codes and titles associated with each TMN title would be unwieldy.

The source of data for the rankings was a special tabulation from a sample household enumeration conducted in October 1966 by the Bureau of the Census as part of its regular Current Population Survey (CPS).[15] Industry entries from the survey of 35,000 households were coded to the Census occupational classification by Census personnel and into the DOT classification by experts of the employment service. The 1966 CPS has some shortcomings, but it was used because it was the only source of estimated DOT employment in the Census.

A major problem is that the schedules of the CPS include only limited data on the characteristics of a worker's job and the industry of employment. It is clear that in many cases the employment service coders had to exercise a considerable amount of judgment in allocating jobs to the very detailed DOT code structure. For example, the job title Offset-pressman is only listed in Census code 512 in the 1960 Census *Classified Index of Occupations and Industries,* but the DOT code (651.782) was assigned to four Census codes (503, Photengravers and lithographers; 512, Pressmen and plate printers; 414, Compositors and typesetters; W, Operatives and kindred workers not elsewhere classified) in the 1966 CPS. This report assumes that the judgments made in the 1966 CPS allocation of the DOT codes to the Census are correct and, even if they are not correct, typical of the judgments made in the 1960 Census. In effect, it is assumed that the same coding problems existed in classifying job titles in the 1960 Census. The aim here is to reveal the classification problem rather than mislead educational planners into the belief that the data are without error.

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[15] Unpublished data developed in 1968 for the Interdepartmental Committee on Occupational Classification, Office of Management and Budget, Executive Office of the President. An outgrowth of the study was *Occupations of the Labor Force According to the Dictionary of Occupational Titles,* Statistical Evaluation Report No. 9 (Statistical Policy and Management Information Systems Division, Office of Management and Budget, Executive Office of the President, 1971).

Since the 1966 CPS survey was only a snapshot of employment in 1 month 6 years ago, and the distribution of employment may have changed sufficiently to render the CPS estimates inaccurate today, the information incorporated in the conversion table must be used with caution. The tabulation should be considered as only an approximate ranking of DOT code by employment.

## Limitations

The DOT titles in the table are more specific than the DOT codes. There are over 14,000 9-digit DOT codes, far too many to list in the table. For most of the matrix occupations in the table, only 6-digit DOT codes are listed, and then only if the employment associated with that code is more than 5 percent of the estimated employment in the related matrix occupational title. Since 6-digit DOT codes have no summary title associated with them, the DOT titles listed in the table are the 9-digit DOT titles with the largest estimated employment. For example, the DOT code 973.381, in the illustration of the matrix title *Compositors and typesetters*, has seven 9-digit titles (Compositor, Compositor apprentice, Correction man, Imposer, Job printer, Job-printer apprentice, Make-up man) from which the two titles listed, Compositor and Job printer, meet the criterion of 5 percent or more of the estimated employment in the TMN occupational group. All of the 9-digit titles are included in the 6-digit code, but only those 9-digit titles are listed which have more than 5 percent of the total estimated employment. The other related 6-digit codes within the 3-digit code (973.) are excluded (973.138, Foreman, composing room; and 973.388, Typographer-proofer) in the illustration.

A 3-digit DOT code is listed in the few instances where all of the 6-digit codes are included in the TMN occupational title. A 9-digit code may be listed when no other jobs can be included in the matrix title.

A single DOT or vocational education program code may appear a number of times in the conversion table because it may be related to more than one matrix occupation. For two reasons, the program codes tend to appear over a wider range of TMN occupational titles than do the DOT codes. First, the Bureau of the Census included specific job titles under the Census occupational titles that were not germane to the DOT structure. For example, Advertising lay-out man, a professional occupation in the DOT, (DOT code 141.081) is included in the Census titles *Compositors and typesetters* (Census 414), a craft occupation, and *Artists and art teachers* (Census 014), a professional occupation. Second, the vocational education instructional programs are often composites of subject matter and train students for clusters of occupations that have similar skills but may lie in different DOT classifications. For example, the job content of the instructional program "Composition, makeup, and typesetting" (17.1901) has six different 3-digit DOT codes (650., 654., 659., 973., 974., 979.) that span two DOT occupational divisions (machine trades occupations and miscellaneous occupations). As a result, the projected demand for any specific vocational education program or any specific DOT code may be distributed over a number of matrix occupational titles. To facilitate the understanding of the relationships between vocational education codes and DOT codes, table 2 provides a listing of vocational educational programs showing the TMN occupational titles they comprise.

While some of the vocational education programs are for clusters of jobs and applicable to a number of TMN occupational titles, others are not broad enough to match the TMN occupational titles. These titles tend to be for jobs whose skills may be taught as part of the subject matter of several instructional programs. For example, there is no single vocational program for patternmakers; the skills of patternmakers are introduced in several programs, e.g., "Metal trades, combined" (17.2304); and "Woodworking", (17.3699).

Another, somewhat complementary, barrier to matching vocational education programs and matrix projections results from the limited scope of the occupational spectrum covered by vocational education curriculums. The BLS matrix covers all occupations, while the instructional programs provide vocational training for a limited proportion of the labor force. In particular, most occupations of the professional, technical, and kindred group in the BLS matrix require a college education, rather than vocational training and, as a result, have no corresponding vocational education instructional program.[16] Although vocational programs do train technicians (and have corresponding codes), vocational education generally is not directly applicable to most professional occupations and it would be inaccurate to relate vocational education codes to professional occupations.

The large number of jobs in the matrix residual titles presents another major barrier. Approximately one-third of the total employment in the 1960 Census was included in general (residual) categories and was not identified by specific occupation. For a variety of reasons noted earlier, the TMN classification of occupations was limited to 163 occupational titles, expanding even further the number of jobs in the residual occupational titles.

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[16] While there is a classification system for higher education, it has not been defined in terms of its jobs or occupations, and as a result, cannot be converted into any of the occupational classification schemes of this report. See *A Taxonomy of Instructional Programs in Higher Education* (U.S. Department of Health, Education, and Welfare, 1970).

The residuals are too broad to classify into specific vocational education programs, even though many of the occupations in these large groups have relatively uniform skill or training requirements. (For example, the skill requirements for all jobs in the TMN title *Sales workers* are quite similar, and the training for these jobs appears to be different only insofar as it is aimed at different products and industries.) Since many of the vocational education training programs are buried in the residuals, the matrix cannot be used to make projections for individual vocational education programs. Moreover, the many jobs included in the residual may have widely differing growth rates and one over-all projection would be of limited value to planners.

Even if the match between the matrix occupational title and the vocational education instructional program is perfect (no other program codes matched with the occupational title, and no other occupational title matched with the vocational education instructional program), the matrix manpower projection does not necessarily include all the occupations in that instructional program. For example, the instructional program 17.1007 "Plumbing and pipefitting" is matched with the matrix title *Plumbers and pipefitters,* and has no other match with a specific matrix occupational title (other than a residual). Nevertheless, there are other job titles for which "Plumbing and pipefitting" is the appropriate instructional program that are included in the residual Census title *Craftsmen and kindred workers, not elsewhere classified,* e.g., *Lawn-sprinkler installer* DOT 869.884).

In short, a perfect match of BLS matrix occupational titles and instructional programs is impossible without serious modification of one of the classification systems because some matrix occupational titles have no vocational education codes, some vocational education codes have no matrix occupational titles, and a number of vocational codes are too broad, or too specific, to match the content of the matrix occupational titles.

### Needed improvements

Several improvements are needed if occupational requirements information is ever to be perfectly matched with enrollment data by vocational education program. In the short run, TMN data could be matched with enrollments if there were a more reliable measure of the relative importance of the instructional programs. If some measure were available, education planners could sum the percentage that each instructional program represents of each TMN occupational title into an index of the projected manpower needs by instructional program. But in the long run, the problems of matching classification systems will be solved only by the development of a standard occupational classification system.

Table 1. Conversion of TMN occupational titles to vocational education classification system

| 1960 Census code | TMN occupational title | Vocational education classification system |  | Dictionary of Occupational Titles |  |
|---|---|---|---|---|---|
|  |  | Code | Program title | Code | Title |
|  | Professional, technical, and kindred workers |  |  |  |  |
| 080 | *Engineers, aeronautical | NA | NA | 002.081<br>002.081<br>002.081 | Aeronautical engineer<br>Aircraft designer<br>Research engineer, aeronautical |
| 081 | *Engineers, chemical | NA | NA | 008.081<br>008.081 | Chemical engineer<br>Measurement and control engineer |
| 082 | *Engineers, civil | NA | NA | 005.081<br>005.081 | Civil engineer<br>Construction engineer |
| 083 | *Engineers, electrical | NA | NA | 003.081<br>003.081<br>003.187 | Electrical engineer<br>Electronic engineer<br>Electrical engineer, power |
| 084 | *Engineers, industrial | NA | NA | 012.188<br>012.188 | Industrial engineer<br>Quality control engineer |
| 085 | *Engineers, mechanical | NA | NA | 007.081 | Mechanical engineer |
| 090 | Engineers, metallurgical | NA | NA | 011.081 | Metallurgist, physical |
| 091 | Engineers, mining | NA | NA | 010.081 | Petroleum engineer |
| 092<br>093 | Other engineers, technical | NA | NA | (1) | (1) |
| 021 | *Chemists | NA | NA | 022.081<br>022.081<br>022.081<br>041.081 | Chemist, organic<br>Chemist, inorganic<br>Chemist, analytical<br>Biochemist |
| 130,<br>103 part | Agricultural scientists | NA | NA | 040.081<br>040.081<br>040.081<br>040.081 | Forester<br>Agronomist<br>Forest ecologist<br>Soil scientist |
| 131 | *Biological scientists | NA | NA | 041.081<br>041.081<br>041.081<br>041.081<br>041.081 | Entomologist<br>Medical bacteriologist<br>Microbiologist<br>Physiologist<br>Plant pathologist |
| 134 | *Geologists and geophysicists | NA | NA | 024.081<br>024.081<br>024.081<br>024.081<br>024.081 | Geologist<br>Geophysicist<br>Geomorphologist<br>Hydrologist<br>Oceanographer, geological |
| 135 | *Mathematicians | NA | NA | 020.088 | Mathematician |
| 140 | *Physicists | NA | NA | 023.081 | Physicist |
| 145 | Other natural scientists | NA | NA | (1) | (1) |
| 074 | *Draftsmen | 17.13 | Drafting | 007.281<br>005.281<br>001.281<br>017.281 | Draftsmen, mechanical<br>Draftsmen, civil<br>Draftsmen, architectural<br>Draftsmen, map |
| 181 | *Surveyors | NA | NA | 018.188<br>018.687 | Surveyor<br>Chainmen |

See footnotes at end of table.

**Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued**

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| (2) | *Air traffic controllers | 17.0403 | Ground operations | 193.168 | Air traffic coordinator |
| 164 | *Radio operators | 04.19 | Transportation | 379.368<br>193. (exc. 193.168) | Dispatcher, radio<br>Radio operator |
| 190<br>191<br>192 | Technicians, other | (1) | (1) | (1) | (1) |
| 071 | *Dentists | NA | NA | 072.108 | Dentist |
| 073 | *Dietitians and nutritionists | NA | NA | 077.168<br>077.128 | Dietitian<br>Dietary consultant |
| 150 | *Nurses, professional | 07.0301 | Nursing | 075.378<br>075.128 | Nurse, general duty<br>Nurse supervisor |
| 152 | *Optometrists | NA | NA | 079.108-026 | Optometrist |
| 153 | Osteopaths | NA | NA | 071.108-010 | Osteopathic physician |
| 160 | *Pharmacists | NA | NA | 074.181 | Pharmacist |
| 162 | *Physicians and surgeons | NA | NA | 070.108<br>070.101 | Physician, general practice<br>Surgeon |
| 173 | *Psychologists | NA | NA | 045.108<br>045.108 | Psychologist, clinical<br>Psychologist, counseling |
| 186 | Technicians, medical and dental | 07.0203 | Medical laboratory assisting | 078.381<br>078.281 | Medical-laboratory assistant<br>Medical technologist |
| | | 07.0204 | Hematology | 078.381 | Hematology technologist |
| | | 07.0404 | Orthotics | 078.368 | Radiologic technologist |
| | | 07.0102 | Dental hygiene | 078.368 | Dental hygienist |
| | | 07.0103 | Dental laboratory tuchnology | 712.381 | Dental-laboratory technician |
| 194 | *Veterinarians | NA | NA | 073.108-014 | Veterinarian |
| 193, 022 | Other medical, health workers | NA | NA | 079.378<br>079.128<br>079.128<br>079.108 | Physical therapist<br>Occupational therapist<br>Recreational therapist<br>Chiropractor |
| 182 | *Teachers, elementary | NA | NA | 092.228<br>092.228 | Elementary teacher<br>Kindergarten teacher |
| 183 | *Teachers, secondary | NA | NA | 091.228<br>091.118 | Teacher, secondary school<br>Principal |
| 030 to 060 | Teachers, college | NA | NA | 090.228<br>090.999 | Faculty member, college or university<br>Graduate assistant |
| 184 | Teachers, other | NA | NA | (1) | (1) |
| 172 | *Economists | NA | NA | 050.088 | Economist |
| 174 | Statisticians and actuaries | NA | NA | 020.188<br>020.188 | Statistician<br>Actuary |
| 175 | Other social scientists | NA | NA | (1) | (1) |

See footnotes at end of table.

**Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued**

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| 000 | *Accountants and auditors | NA | NA | 160.188 | Accountant |
| | | | | 160.188 | Auditor |
| 012 | Airplane pilots and navigators | 16.0601 | Commercial pilot training | 196.283 | Airplane pilot, commercial |
| 013 | *Architects | NA | NA | 001.081 | Architect |
| 010<br>014<br>015<br>020<br>070<br>101<br>120<br>180 | Workers in the arts and entertainment | 17.07 | Commercial art occupations | 141. | Commercial artist |
| | | | | 970. | Art work occupations |
| | | (3) | (3) | [3]099. | Occupations in education, not elsewhere classified |
| | | | | 130 | Freelance writer |
| | | (3) | (3) | [3]131. | Writer and editor, motion picture, radio, TV |
| | | | | 139. | Occupations in writing, not elsewhere classified |
| | | | | 148. | Sculptor and related occupations |
| | | | | 149. | Occupations in art, not elsewhere classified |
| | | | | 150. | Occupations in dramatics |
| | | | | 151. | Occupations in dancing |
| | | | | 152. | Occupations in music |
| | | | | 153. | Occupations in athletics and sports |
| | | | | 159. | Occupations in entertainment and recreation |
| 023 | *Clergymen | NA | NA | 120.108 | Clergymen |
| 072 | *Designers, except design draftsmen | 17.0703 | Product design | 142.081 | Clothes designer |
| | | | | 142.081 | Furniture designer |
| | | 17.0701 | Interior decorating | 142.051 | Interior designer and decorator |
| | | 17.07 | Commercial art occupations | 142.081 | Commercial designer |
| 075 | *Editors and reporters | NA | NA | 132.268 | Reporter |
| | | | | 132.088 | Copy writer |
| | | | | 132.038 | Editor, department |
| | | | | 132.018 | Editor, newspaper |
| | | | | 132.068 | Columnist |
| 105 | Lawyers and judges | NA | NA | 110.108 | Lawyer |
| | | | | 111.108 | Judge |
| 111 | *Librarians | NA | NA | 100.168 | Librarian |
| | | | | 100.168 | Librarian, reference |
| | | | | 100.388 | Cataloger |
| 154 | *Personnel and labor relations workers | 14.0603 | Personnel assistants | 166.118 | Manager, personnel |
| | | | | 166.118 | Director, industrial relations |
| | | | | 205.368 | Personnel clerk |
| | | 14.0602 | Interview and test technicians | 166.268 | Employment interviewer |
| | | 14.0601 | Educational assistants and training specialists | 166.228 | Training representative |
| 161 | *Photographers | NA | NA | 143.062 | Photographer, commercial |
| | | | | 143.062 | Photographer, portrait |
| | | | | 143.062 | Photographer, news |
| 171 | *Social and welfare workers | NA | NA | 195.108 | Caseworker |

See footnotes at end of table.

**Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued**

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| 030 part, 102, 103 part, 104, 163, 165, 170, 195 | Profession[illegible]d technical workers, not elsewhere classified | (1) | (1) | (1) | (1) |
| | **Managers, officials, and proprietors** | | | | |
| 252 | *Conductors, railroad | NA | NA | 198.168 | Conductor |
| 253 | *Creditmen | 14.0899 | Supervisory and administrative management occupations, other | 168.168 | Manager, credit and collection |
| | | 14.0499 | Information, communication occupations, other | 249.368 | Credit clerk |
| 265 | Officers, pilots, engineers, ship | 17.0802 | Ship and boat operation and maintenance | 197.130 | Engineer |
| | | | | 911.138 | Barge captain |
| | | (3) | (3) | [3] 197.133 | Tugboat captain |
| 280 | *Postmasters and assistants | NA | NA | 188.168 -086 | Postmaster and assistant postmaster |
| 285 | *Purchasing agents | 04.99 | Distributive education, other | 162.158 | Purchasing agent |
| 250, 251, 254, 260, 262, 270, 275, R | Managers, officials and proprietors, not elsewhere classified | (1) | (1) | (1) | (1) |
| | **Clerical and kindred workers** | | | | |
| 345, 360, Z | Stenographers, typists, and secretaries | 14.0702 | Secretaries | 201.368 | Secretary |
| | | 14.0901 | Clerk-typists | 209.388 | Clerk-typist |
| | | 14.0902 | Typists | 203.588 | Typist |
| | | 14.0703 | Stenographers | 202.388 | Stenographer |
| | | 14.0399 | Filing, office machine, and general office clerical occupations, other | (4) | (4) |
| 325 | Office machine operators | 14.020201 | Keypunch and coding equipment operators | 213.582 | Keypunch operator |
| | | 14.0104 | Machine operators, billing, bookkeeping, and computing | 216.488 | Calculating-machine operator |
| | | | | 214.488 | Billing-machine operator |
| | | | | 215.388 | Bookkeeping-machine operator |
| | | 14.0201 | Computer and console operators | 213.382 | Digital-computer operator |
| | | 14.0301 | Duplicating machine operators | 207.782 | Duplicating-machine operator |
| | | | | 207.885 | Duplicating-machine operator |
| | | 14.0404 | Mail-preparing and mail-handling machine operators | (4) | (4) |
| | | 14.0202 | Peripheral equipment operators | (4) | (4) |
| | | 14.02 | Business data processing systems occupations | (4) | (4) |
| | | 14.0399 | Filing, office machine, and general office clerical occupations, other | (4) | (4) |
| 310 | Accounting clerks | 14.0303 | General office clerks | 219.448 | Accounting clerk |
| 310 | Bookkeepers, hand | 14.0102 | Bookkeepers | 210.388 | Bookkeeper |
| 305 | *Bank tellers | 14.0105 | Tellers | 212.368 | Teller |
| 312 | *Cashiers | 04.06 | Food distribution | 211.468 | Cashier |
| | | 14.0103 | Cashiers | 299.468 | Cashier-checker |
| | | | | 211.368 | Cashier |
| 323 | *Mail carriers | 14.0403 | Mail and postal clerks | 233.388 | Mail carrier |

See footnotes at end of table.

**Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued**

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| 340 | *Postal clerks | 14.0403 | Mail and postal clerks | 232.368 | Post office clerk |
| 343 | *Shipping and receiving clerks | 14.0503 | Shipping and receiving clerks | 222.587 | Shipping clerk |
| | | | | 222.387 | Shipping and receiving clerk |
| | | | | 222.138 | Shipping clerk |
| | | | | 222.687 | Shipping checker |
| | | 14.0505 | Traffic, rate and transportation clerks | (4) | (4) |
| 353 | *Telephone operators | 14.0401 | Communications system clerks and operators | 235.862 | Telephone operator |
| | | | | 235.138 | Telephone operator, chief |
| | | 14.0499 | Information communication occupations, other | (4) | (4) |
| 301,302,303, 304,313,314, 315,320,321, 324,333,341, 350,351,352 354 and Y | Clerical and kindred workers, not elsewhere classified | (1) | (1) | (1) | (1) |
| 380 to 385, 390,393,395, and S | *Salesworkers | (1) | (1) | (1) | (1) |
| | Craftsmen, foremen, and kindred workers | | | | |
| Q | *Carpenters | 17.1001 | Carpentry | 860.381 | Carpenter |
| | | | | 860.281 | Carpenter, maintenance |
| 405 | Brickmasons and tile setters | 17.1004 | Masonry | 861.381 | Bricklayer |
| | | | | 861.781 | Tile setter |
| 4[illegible] | *Cement and concrete finishers | 17.1099 | Construction and maintenance trades, other | 844.884 | Cement mason |
| | | 17.100302 | Operation, heavy equipment | 852.884 | Concrete paver-operator helper |
| 421 | *Electricians | 17.1002 | Electricity | 824.281 | Electrician |
| | | 17.14 | Electrical occupations | 829.281 | Electrical repairman |
| | | 17.1401 | Industrial electrician | (4) | (4) |
| 425 | Excavating, grading machine operators | 17.100302 | Operation, heavy equipment | 859.883 | Operating engineer |
| | | | | 850.883 | Bulldozer operator |
| | | | | 850.883 | Power-shovel operator |
| 495,501 | Painters and paperhangers | 17.1005 | Painting and decorating | 840.781 | Painter |
| | | | | 841.781 | Paperhanger |
| 505 | *Plasterers | 17.1006 | Plastering | 842.781 | Plasterer |
| | | | | 842.381 | Stucco mason |
| | | 17.1008 | Dry-wall installation | 842.884 | Dry-wall applicator |
| 510 | *Plumbers and pipefitters | 17.1007 | Plumbing and pipefitting | 862.381 | Plumber |
| | | | | 862.381 | Pipefitter |
| 514 | *Roofers and slaters | 17.1010 | Roofing | 866.381 | Roofer |
| 523 | Structural metal workers | 17.1099 | Construction and maintenance trades, other | 801.781 | Structural-steel worker |
| | | | | 809.381 | Lay-out man |
| | | 17.2304 | Metal trades, combined | (4) | (4) |
| 430 | *Foremen, not elsewhere classified | (1) | (1) | (1) | (1) |
| 465 | Machinists | 17.2302 | Machine shop | 600.280 | Machinist |
| | | | | 600.380 | Job setter |
| | | 17.2303 | Machine tool operation | (4) | (4) |
| | | 17.2304 | Metal trades, combined | 616.380 | Set-up man |

See footnotes at end of table.

Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| 431,402 | Blacksmiths, forgemen, and hammermen | 17.2399 | Metalworking, other | 610.381 | Blacksmith |
| | | | | 610.782 | Drop-hammer operator |
| | | | | 611.782 | Forging-press operator |
| | | | | 611.885 | Forging-press operator |
| | | | | 612.782 | Header-machine operator |
| 403 | *Boilermakers | 17.1099 | Construction and maintenance trades, other | 805.281 | Boilermaker |
| | | | | 805.381 | Boilerhouse repairman |
| | | | | 805.781 | Boilermaker mechanic |
| 435 | *Heat treaters, annealers | 17.24 | Metallurgy | 504.732 | Heat treater |
| | | | | 504.782 | Annealer |
| | | | | 504.131 | Heat-treat foreman |
| 491 | *Millwrights | 17.1099 | Construction and maintenance trades, other | 638.281 | Millwright |
| 492 | Molders, metal (except coremakers) | 17.2301 | Foundry | 518.381 | Molder |
| 502 | *Patternmakers, metal and wood | 17.2302 | Machine shop | 600.280 | Patternmaker, metal |
| | | 17.3699 | Woodworking, other | 661.380 | Model maker, wood |
| 513 | *Rollers and roll hands | 17.2399 | Metalworking, other | 613.782<br>(4) | Roller, primary mill<br>(4) |
| | | 17.2304<br>(3) | Metal trades, combined<br>(3) | [3] 613.885 | Rolling mill operator helper |
| 525 | *Sheet metal workers | 17.2305 | Sheet metal | 804.281<br>(4) | Sheet-metal worker<br>(4) |
| | | 17.2304 | Metal trades, combined | | |
| 530 | *Toolmakers and diemakers | 17.2307 | Tool-and-diemaking | 601.280 | Tool-and-diemaker |
| | | | | 601.281 | Diemaker, bench, stamping |
| | | | | 601.381 | Plastic tool maker |
| | | | | 601.130 | Tool-and-die foreman |
| 414 | *Compositors and typesetters | 17.1901 | Composition, makeup, and typesetting | 973.381 | Compositor |
| | | | | 973.381 | Job printer |
| | | | | 650.582 | Linotype operator |
| | | 17.1902 | Printing press occupations | 651.782 | Offset-pressman |
| 423 | *Electrotypers and stereotypers | 17.1901 | Composition, makeup, and typesetting | 974.381<br>(4) | Electrotyper<br>(4) |
| | | 17.1903 | Lithography, photography, and platemaking | | |
| | | (3) | (3) | [3] 975.782 | Stereotyper |
| 424 | *Engravers, except photengravers | 17.2399 | Metalworking, other | 704.381 | Engraver |
| | | | | 704.884 | Engraver, machine |
| 503 | *Photengravers and lithographers | 17.1904 | Photoengraving | 971.381 | Photoengraver |
| | | 17.1902 | Printing press occupations | 651.782 | Cylinder-pressman |
| | | 17.1903 | Lithography, photography, and platemaking | 972.382 | Photographer lithographic |
| 512 | *Pressmen and plate printers | 17.1902 | Printing press occupations | 651.782 | Offset-pressman |
| | | | | 651.782 | Web-pressman |
| | | | | 651.782 | Cylinder-pressman |
| | | 17.1903 | Lithography, photography, and platemaking | 972.381 | Transferrer |
| | | | | 973.381 | Job printer |
| | | 17.1901 | Composition, makeup and typesetting | (4) | (4) |
| 453 | Linemen and servicemen | 17.1402 | Linemen | 821.381 | Lineman |
| | | | | 829.381 | Cable splicer |
| | | 17.1501 | Communications | 822.381 | Station installer |
| | | | | 822.281 | Private-branch-exchange repairman |
| | | | | 822.281 | Central-office repairman |

See footnotes at end of table.

**Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued**

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| 454 | *Locomotive engineers | NA | NA | 910.383 | Locomotive engineer |
| 460 | *Locomotive firemen | NA | NA | 910.383 | Locomotive fireman |
| 471 | *Airplane mechanics and repairmen | 17.0401 | Aircraft maintenance | 621.281 | Aircraft-and-engine mechanic |
| 472 | Motor vehicle mechanics | 17.0302 | Mechanics | 620.281 | Automobile mechanic |
| | | 17.0301 | Body and fender | 807.381 | Automobile-body repairman |
| 473 | Office machine mechanics | 17.06 | Business machine maintenance | 633.281 | Office-machine serviceman |
| | | | | 633.281 | Cash-register serviceman |
| | | 16.0108 | Electronic technology | 828.281 | Electronics mechanic |
| 474 | *Radio and TV mechanics | 17.1503 | Radio/television | 720.281 | Television service and repairman |
| | | | | 720.281 | Radio repairman |
| | | (3) | (3) | [3] 823.281 | Radio mechanic |
| 475 | Railroad and car shop mechanics | 17.1402 | Linemen | 822.281 | Signal maintainer |
| | | 17.12 | Diesel mechanics | 625.281 | Diesel mechanic |
| | | (3) | (3) | [3] 622.381 | Carmen |
| 470<br>480 | Other mechanics and repairmen | (1) | (1) | (1) | (1) |
| 401 | *Bakers | 17.2901 | Baker | 526.781 | Baker |
| 410 | *Cabinetmakers | 17.3601 | Millwork and cabinetmaking | 660.280 | Cabinetmaker |
| | | 17.35 | Upholstering | 780.381 | Furniture upholsterer |
| 415 | *Cranemen, derrickmen, hoistmen | 17.100302 | Operation, heavy equipment | 921.883 | Truck-crane operator |
| | | | | 859.883 | Operating engineer |
| | | (3) | (3) | [3] 921.883 | Electric monorail-crane operator |
| 434 | *Glaziers | 17.1009 | Glazing | 865.781 | Glazier |
| | | | | 865.884 | Glass installer |
| 451 | *Jewelers and watchmakers | 17.2102 | Watchmaking and repair | 715.281 | Watchmaker |
| | | (3) | (3) | [3] 700.381 | Stone setter |
| 461 | *Loom fixers | 17.3399 | Textile production and fabrication, other | 683.280 | Loom fixer |
| | | | | 681.280 | Machine fixer |
| 494 | *Opticians, lens grinders, polishers | 17.2101 | Instruments (other than watches and clocks) | 713.381 | Optician |
| | | | | 711.781 | Lens grinder |
| | | | | 711.884 | Lens polisher |
| | | | | 713.251 | Optician, dispensing |
| 444 | *Inspectors, scalers, and graders, log and lumber | 17.3699 | Woodworking, other | 761.381 | Stock maker, custom |
| | | (3) | (3) | [3] 669.587 | Grader |
| 450 | *Inspectors, other | (1) | (1) | (1) | (1) |
| 535 | *Upholsterers | 17.35 | Upholstering | 780.381 | Furniture upholsterer |
| | | 17.34 | Leatherworking | 780.884 | Upholsterer |
| 404,420,432, 490,493,504, 515,520,521, 545 | Craftsmen and kindred workers, not elsewhere classified | (1) | (1) | (1) | (1) |

See footnotes at end of table.

Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| | **Operatives and kindred workers** | | | | |
| 641, T | Drivers, bus, truck, tractor | 04.19 | Transportation | 913.463 | Bus driver |
| | | (3) | (3) | [3] 905.883 | Truck driver, heavy |
| | | | | 906.883 | Truck driver, light |
| | | | | 904.883 | Tractor-trailer-truck driver |
| 714, 650 | Deliverymen and routemen | 04.19 | Transportation | 913.463 | Taxi driver |
| | | (3) | (3) | [3] 906.883 | Truck driver, light |
| | | | | 292.358 | Salesman-driver |
| | | | | 905.883 | Truck driver, heavy |
| 640, 713 | Brakemen and switchmen men | 17.1402 | Linemen | 822.281 | Signal maintainer |
| | | (3) | (3) | [3] 910.884 | Brakeman |
| | | (3) | (3) | [3] 910.887 | Switch tender |
| | | (3) | (3) | [3] 910.782 | Towerman |
| 701 | *Power station operatives | 17.3201 | Electric power generating plants | 952.782 | Substation operator |
| | | 17.32 | Stationary energy source occupations | 952.782 | Switchboard operator |
| | | | | 952.782 | Power-plant operator |
| 703 | *Sailors and deckhands | 17.0801 | Seamanship | 911.887 | Deckhand |
| | | (3) | (3) | [3] 911.884 | Able seaman |
| 670 | *Furnacemen, smeltermen, pourers | 17.2301 | Foundry | 514.884 | Pourer, metal |
| | | | | 512.782 | Furnace operator |
| | | | | 613.782 | Furnace operator |
| 672 | *Heaters, metal | 17.2399 | Metalworking, other | 619.782 | Heater |
| 721 | *Welders and flame-cutters | 17.230602 | Electric welding | 810.884 | Welder, arc |
| | | | | 810.782 | Welder, spot |
| | | 17.230603 | Combination welding | 812.884 | Welder, combination |
| | | 17.230601 | Gas welding | 816.884 | Flame cutter, hand |
| | | 17.2306 | Welding and cutting | (4) | (4) |
| | | 17.230604 | Brazing and soldering | (4) | (4) |
| (2) | Assemblers, metalworking, class A | 17.2399 | Metalworking, other | (1) | (1) |
| (2) | Assemblers, metalworking, class B | 17.2399 | Metalworking, other | (1) | (1) |
| 643 | Inspectors, metalworking, class B | 17.24 | Metallurgy | (1) | (1) |
| (2) | Machine tool operators, metalworking, class B | 17.2302 | Machine shop | 609. | Metal machining occupations |
| | | 17.2303 | Machine tool operation | 602. | Gear machining occupations |
| | | | | 603. | Abrading occupations |
| | | | | 604. | Turning occupations |
| | | | | 605. | Milling and planing occupations |
| | | | | 606. | Boring occupations |
| | | 17.2304 | Metal trades, combined | (4) | (4) |
| | | 17.2307 | Tool-and-diemaking | (4) | (4) |
| | | 17.2399 | Metalworking, other | (4) | (4) |
| (2) | *Electroplaters | 17.2399 | Metalworking, other | 500. | Electroplating occupations (except helpers) |
| (2) | Electroplaters' helpers | 17.2399 | Metalworking, other | 500.886 | Electroplating laborer |
| 673 | *Knitters, loopers, and toppers | 17.3399 | Textile production and fabrication, other | 685.885 | Knitting-machine operator |
| | | | | 684.885 | Seamless-hosiery knitter |
| | | | | 689.782 | Looper |
| | | | | 684.782 | Knitting-machine operator, full-fashioned hosiery |

See footnotes at end of table.

## Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued

| 1960 Census code | TMN occupational title | Vocational education classification system |  | Dictionary of Occupational Titles |  |
|---|---|---|---|---|---|
|  |  | Code | Program title | Code | Title |
| 710 | Spinners, textile | 17.3399 | Textile production and fabrication, other | 682.885 | Spinner, frame |
|  |  |  |  | 682.885 | Twister |
|  |  | (3) | (3) | [3] 557.885 | Spinner |
| 720 | *Weavers, textile | 17.3399 | Textile production and fabrication, other | 683.782 | Weaver |
| 706 | Sewers and stitchers | 17.3399 | Textile production and fabrication, other | 786.782 | Sewing-machine operator, regular equipment |
|  |  |  |  | 787.782 | Sewing-machine operator, regular equipment |
|  |  | 09.0204 | Home furnishings, equipment and services | 782.884 | Sewer, hand |
|  |  | (3) | (3) | [3] 690.782 | Stitcher, standard machine |
|  |  | (3) | (3) | [3] 785.361 | Seamstress |
| 630 | *Asbestos, insulation workers | 17.1099 | Construction and maintenance trades, other | 863.884 | Insulation installer |
|  |  |  |  | 863.884 | Insulation worker |
|  |  |  |  | 863.884 | Sider |
|  |  |  |  | 863.381 | Pipe coverer and insulator |
| 632 | Attendants, auto service, parking | 04.16 | Petroleum | 915.878 | Automobile self-service station attendant |
|  |  | 04.03 | Automotive | 915.878 | Parking-lot attendant |
|  |  | (3) | (3) | [3] 915.867 | Automobile-service station attendant |
| 634 | *Blasters and powdermen | 17.1099 | Construction and maintenance trades, other | (4) | (4) |
| 674 | Laundry, dry cleaning operatives | 17.16 | Fabric maintenance service | 363.782 | Presser, machine |
|  |  | 17.1602 | Laundering | 361.887 | Laundry laborer |
|  |  |  |  | 369.887 | Folder |
|  |  |  |  | 361.885 | Laundryman |
|  |  |  |  | 363.885 | Press operator |
|  |  | 17.1601 | Dry cleaning | (4) | (4) |
|  |  | 17.1699 | Fabric maintenance service, other | (4) | (4) |
| 675 | *Meat cutters, except meat packing | 17.2903 | Meat cutter | 316.884 | Meat cutter |
|  |  | 04.06 | Food distribution | 299.138 | Department head, supermarket |
| 685 | Mine operatives and laborers | (3) | (3) | [3] 932.883 | Shuttle-car operator |
|  |  | (3) | (3) | [3] 930.782 | Rotary driller |
|  |  |  |  | 939.887 | Laborer |
|  |  |  |  | 939.281 | Miner |
| 601-605,610, 612 to 615, 620, 621,631 part, 635,642, 643 part, 645,651,652, 653,654,671, 680,690,691, 692,693,694, 695,704,712, and W | Other operatives and kindred workers, not elsewhere classified | (1) | (1) | (1) | (1) |

See footnotes at end of table.

Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| | Service workers | | | | |
| 801, 802, 803, P | *Private household workers | 09.0201 | Care and guidance of children | 307.878 | Nursemaid |
| | | 09.0202 | Clothing management, production, services | (4) | (4) |
| | | 09.0203 | Food management, production, services | (4) | |
| | | 09.0206 | Institutional and home management and supporting services | 306.878 | Homemaker |
| | | (3) | (3) | [3] 306.878 | Maid, general |
| | | | | 301.887 | Day worker |
| 850 | *Firemen | 17.2801 | Firemen training | 373.884 | Fire-fighter |
| | | | | 373.168 | Fire captain |
| | | 07.0907 | Medical emergency technician | (4) | (4) |
| 851, 860 | Guards, watchmen, and doorkeepers | 17.2802 | Law enforcement training | (4) | (4) |
| | | (3) | (3) | [3] 372.868 | Guard |
| | | (3) | (3) | [3] 372.868 | Watchman |
| | | (3) | (3) | [3] 372.868 | Correction officer |
| | | (3) | (3) | [3] 371.868 | School-crossing guard |
| 852, 853, 854 | Policemen and other law enforcement officials | 17.2802 | Law enforcement training | 375.268 | Detective |
| | | | | 375.268 | Patrolman |
| | | | | 375.268 | State-highway patrolman |
| 815 | *Bartenders | 04.07 | Food services | (4) | (4) |
| | | (3) | (3) | [3] 312.878 | Bartender |
| 825 | *Cooks, except private household | 17.2902 | Cook/chef | 313.381 | Cook |
| | | | | 314.381 | Cook, short order |
| 830 | *Counter and fountain workers | 17.2904 | Waiter/waitress | 311.878 | Counterman, cafeteria |
| | | | | 311.878 | Counterman, lunchroom or coffee shop |
| | | | | 319.878 | Fountain man |
| | | (3) | (3) | [3] 318.887 | Kitchen helper |
| 875 | *Waiters and waitresses | 17.2904 | Waiter/waitress | (4) | (4) |
| | | 04.07 | Food services | (4) | (4) |
| 832 part | *Airline stewards and stewardesses | 04.19 | Transportation | 352.878-010 | Airplane stewardess |
| 810 | *Attendants, hospital and other institutions | 07.0303 | Nursing assistant | 355.878 | Nurse aid |
| | | 07.0304 | Psychiatric aid | 355.878 | Psychiatric aid |
| | | (3) | (3) | [3] 355.878 | Orderly |
| 824 | Charwomen and cleaners | 17.11 | Custodial services | 381.887 | Porter |
| | | | | 381.887 | Charwomen |
| | | 09.0206 | Institutional and home management and supporting services | (4) | (4) |
| | | (3) | (3) | [3] 323.887 | Maid |
| | | (3) | (3) | [3] 389.887 | Window cleaner |
| 834 | Janitors and sextons | 17.11 | Custodial services | 382.884 | Janitor |
| | | | | 381.887 | Porters |
| | | 17.10 | Construction and maintenance trades | (4) | (4) |
| 802 | *Practical nurses | 07.0907 | Medical emergency technician | (4) | (4) |
| | | 07.0302 | Practical nursing | (4) | (4) |
| | | (3) | (3) | [3] 354.878 | Practical nurse |

See footnotes at end of table.

Table 1. Conversion of TMN occupational titles to vocational education classification system—Continued

| 1960 Census code | TMN occupational title | Vocational education classification system | | Dictionary of Occupational Titles | |
|---|---|---|---|---|---|
| | | Code | Program title | Code | Title |
| 812,813,814, 821,820,823, 831,843,832 part, 835,840,841, 874,890 | Other service workers, not elsewhere classified | (1) | (1) | (1) | (1) |
| 960 to 973, and X | *Laborers, except farm and mine | (1) | (1) | (1) | (1) |
| 901, U, V, 905, N, and 222 | Farmers and farm workers | (1) | (1) | (1) | (1) |

NA — not applicable.

* 1960 matrix title comparable to 1970 Census title.

(1) Too broad for specific comparability.

(2) Data developed by BLS from sources other than the Census.

(3) The DOT code has more than 5 percent of the total estimated employment in the TMN occupational title but there is no corresponding specifically detailed vocational education instructional program code.

(4) The vocational education instructional program has no corresponding DOT code with more than 5 percent of the total estimated employment in the TMN occupational title.

Table 2. Vocational education instructional programs and related TMN occupational titles

| Instructional program | | TMN occupational title |
|---|---|---|
| Code | Title | |
| 04. | **Distributive education** | |
| 04.03 | Automotive | Attendants, auto service, parking |
| 04.06 | Food distribution | Cashiers<br>Meat cutters, except meat packing |
| 04.07 | Food services | Bartenders<br>Waiters and waitresses |
| 04.16 | Petroleum | Attendants, auto service, parking |
| 04.19 | Transportation | Radio operators<br>Airline stewards and stewardesses<br>Drivers, bus, truck, tractor<br>Deliverymen and routemen |
| 04.99 | Distributive education, other | Purchasing agents |
| 07. | **Health occupations education** | |
| 07.0102 | Dental hygiene | Technicians, medical and dental |
| 07.0103 | Dental laboratory technology | Technicians, medical and dental |
| 07.0203 | Medical laboratory assisting | Technicians, medical and dental |
| 07.0204 | Hematology | Technicians, medical and dental |
| 07.0301 | Nursing | Nurses, professional |
| 07.0302 | Practical nursing | Practical nurses |
| 07.0303 | Nursing assistance | Attendants, hospital and other institutions |
| 07.0304 | Psychiatric aid | Attendants, hospital and other institutions |
| 07.0404 | Orthotics | Technicians, medical and dental |
| 07.0907 | Medical emergency technician | Firemen<br>Practical nurses |
| 09. | **Home economics** | |
| 09.0201 | Care and guidance of children | Private household workers |
| 09.0202 | Clothing management, production, services | Private household workers |
| 09.0203 | Food management, production, services | Private household workers |
| 09.0204 | Home furnishings equipment and services | Sewers and stitchers |
| 09.0205 | Institutional and home management and supporting services | Charwomen and cleaners<br>Private household workers |
| 14. | **Office occupations** | |
| 14.0102 | Bookkeepers | Bookkeepers, hand |
| 14.0103 | Cashiers | Cashiers |
| 14.0104 | Machine operators: billing, bookkeeping, and computing | Office machine operators |
| 14.0105 | Tellers | Bank tellers |
| 14.02 | Business data processing systems occupations | Office machine operators |
| 14.0201 | Computer and console operators | Office machine operators |
| 14.0202 | Peripheral equipment operators | Office machine operators |
| 14.020201 | Keypunch and coding equipment operators | Office machine operators |
| 14.0301 | Duplicating machine operators | Office machine operators |

Table 2. Vocational education instructional programs and related TMN occupational titles—Continued

| Instructional program | | TMN occupational title |
|---|---|---|
| Code | Title | |
| 14.0303 | General office clerks | Accounting clerks |
| 14.0399 | Filing, office machine, and general office clerical occupations, other | Stenographers, typists, and secretaries<br>Office machine operators |
| 14.0401 | Communications system clerks and operators | Telephone operators |
| 14.0403 | Mail and postal clerks | Mail carriers<br>Postal clerks |
| 14.0404 | Mail-preparing and mail-handling machine operators | Office machine operators |
| 14.0499 | Information communication occupations, other | Creditmen<br>Telephone operators |
| 14.0503 | Shipping and receiving clerks | Shipping and receiving clerks |
| 14.0505 | Traffic, rate and transportation clerks | Shipping and receiving clerks |
| 14.0601 | Education assistants and training specialists | Personnel and labor relations workers |
| 14.0602 | Interview and test technicians | Personnel and labor relations workers |
| 14.0603 | Personnel assistants | Personnel and labor relations workers |
| 14.0702 | Secretaries | Stenographers, typists, and secretaries |
| 14.0703 | Stenographers | Stenographers, typists, and secretaries |
| 14.0899 | Supervisory and administrative management occupations, other | Creditmen |
| 14.0901 | Clerk-typists | Stenographers, typists, and secretaries |
| 14.0902 | Typists | Stenographers, typists, and secretaries |
| 16. | **Technical education** | |
| 16.0108 | Electronic technology | Office machine mechanics |
| 16.0601 | Commercial pilot training | Airplane pilots and navigators |
| 17. | **Trade and industrial occupations** | |
| 17.0301 | Body and fender | Motor vehicle mechanics |
| 17.0302 | Mechanics | Motor vehicle mechanics |
| 17.0401 | Aircraft maintenance | Airplane mechanics and repairmen |
| 17.0403 | Ground operations | Air traffic controllers<br>Radio operators |
| 17.06 | Business machine maintenance | Office machine mechanics |
| 17.07 | Commercial art occupations | Workers in the arts and entertainment<br>Designers, except design draftsmen |
| 17.0701 | Interior decorating | Designers, except design draftsmen |
| 17.0703 | Product design | Designers, except design draftsmen |
| 17.0801 | Seamanship | Sailors and deckhands |
| 17.0802 | Ship and boat operation and maintenance | Officers, pilots, engineers, ship |
| 17.10 | Construction and maintenance trades | Janitors and sextons |
| 17.1001 | Carpentry | Carpenters |
| 17.1002 | Electricity | Electricians |
| 17.100302 | Operation, heavy equipment | Cement and concrete finishers<br>Cranemen, derrickmen, hoistmen<br>Excavating, grading machine operators |

**Table 2.** Vocational education instructional programs and related TMN occupational titles—Continued

| Instructional program | | TMN occupational title |
|---|---|---|
| Code | Title | |
| 17.1004 | Masonry | Brickmasons and tile setters |
| 17.1005 | Painting and decorating | Painters and paperhangers |
| 17.1006 | Plastering | Plasterers |
| 17.1007 | Plumbing and pipefitting | Plumbers and pipefitters |
| 17.1008 | Dry-wall installation | Plasterers |
| 17.1009 | Glazing | Glaziers |
| 17.1010 | Roofing | Roofers and slaters |
| 17.1099 | Construction and maintenance trades, other | Asbestos, insulation workers<br>Blasters and powdermen<br>Cement and concrete finishers<br>Structural metalworkers<br>Boilermakers<br>Millwrights |
| 17.11 | Custodial services | Charwomen and cleaners<br>Janitors and sextons |
| 17.12 | Diesel mechanics | Railroad and car shop mechanics |
| 17.13 | Drafting | Draftsmen |
| 17.14 | Electrical occupations | Electricians |
| 17.1401 | Industrial electrician | Electricians |
| 17.1402 | Linemen | Linemen and servicemen,<br>Railroad and car shop mechanics<br>Brakemen and switchmen |
| 17.1501 | Communications | Linemen and servicemen |
| 17.1503 | Radio/television | Radio and TV mechanics |
| 17.16 | Fabric maintenance services | Laundry, drycleaning operators |
| 17.1601 | Drycleaning | Laundry, drycleaning operators |
| 17.1602 | Laundering | Laundry, drycleaning operators |
| 17.1699 | Fabric maintenance service, other | Laundry, drycleaning operators |
| 17.1901 | Composition, makeup, and typesetting | Compositors and typesetters<br>Electrotypers and stereotypers<br>Pressmen and plate printers |
| 17.1902 | Printing press occupations | Compositors and typesetters<br>Photoengravers and lithographers<br>Pressmen and plate printers |
| 17.1903 | Lithography, photography, and platemaking | Electrotypers and stereotypers<br>Photoengravers and lithographers<br>Pressmen and plate printers |
| 17.1904 | Photoengraving | Photoengravers and lithographers |
| 17.2101 | Instruments (other than watches and clocks) | Opticians, lens grinders, polishers |
| 17.2102 | Watchmaking and repair | Jewelers and watchmakers |
| 17.2301 | Foundry | Furnacemen, smeltermen, pourers<br>Molders, metal (except coremakers) |
| 17.2302 | Machine shop | Patternmakers, metal and wood<br>Machine tool operators, metal working, class B<br>Machinists |
| 17.2303 | Machine tool operation | Machinists<br>Machine tool operators, metalworking, class B |

**Table 2. Vocational education instructional programs and related TMN occupational titles—Continued**

| Instructional program | | TMN occupational title |
|---|---|---|
| Code | Title | |
| 17.2304 | Metal trades, combined | Rollers and roll hands |
| | | Sheet metal workers |
| | | Structural metal workers |
| | | Machinists |
| | | Machine tool operators, metalworking, class B |
| 17.2305 | Sheet metal | Sheet metal workers |
| 17.2306 | Welding and cutting | Welders and flamecutters |
| 17.230601 | Gas welding | Welders and flamecutters |
| 17.230602 | Electric welding | Welders and flamecutters |
| 17.230603 | Combination welding | Welders and flamecutters |
| 17.230604 | Brazing and soldering | Welders and flamecutters |
| 17.2307 | Tool-and-diemaking | Toolmakers and diemakers |
| | | Machine tool operators, metalworking, class B |
| 17.2399 | Metalworking, other | Rollers and roll hands |
| | | Engravers, except photoengravers |
| | | Heaters, metal |
| | | Assemblers, metalworking, class A |
| | | Assemblers, metalworking, class B |
| | | Electroplaters |
| | | Electroplaters' helpers |
| | | Blacksmiths, forgemen, and hammermen |
| 17.24 | Metallurgy | Heat treaters, annealers |
| | | Inspectors, metalworking, class B |
| 17.2801 | Firemen training | Firemen |
| 17.2802 | Law enforcement training | Guards, watchmen, and doorkeepers |
| | | Policemen and other law enforcement officials |
| 17.2901 | Baker | Bakers |
| 17.2902 | Cook/chef | Cooks, except private household |
| 17.2903 | Meat cutter | Meat cutters, except meat packing |
| 17.2904 | Waiter/waitress | Counter and fountain workers |
| | | Waiters and waitresses |
| 17.32 | Stationary energy source occupations | Power station operatives |
| 17.3201 | Electric power generating plants | Power station operatives |
| 17.3399 | Textile production and fabrication, other | Loom fixers |
| | | Knitters, loopers, and toppers |
| | | Spinners, textile |
| | | Weavers, textile |
| | | Sewers and stitchers |
| 17.34 | Leatherworking | Upholsterers |
| 17.35 | Upholstering | Upholsterers |
| | | Cabinetmakers |
| 17.3601 | Millwork and cabinet making | Cabinetmakers |
| 17.3699 | Woodworking, other | Inspectors, scalers, and graders, log and lumber |
| | | Patternmakers, metal and wood |

Cost $1,763.05
Quantity 2,000

GPO 870-240